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FEBRUARY 1961, VOL. 52, NO. 2

Indexing Reports . . . New Libraries Survey . . . Publisher Visits Soviet . . . Naval Observatory Library . . . Management Views SLA Personnel Survey . . . Executives as Readers . . . San Francisco: Convention City

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INDEXED IN *Business Periodicals Index, Public Affairs Information Service, Library Literature, Business Methods Index* and *Library Science Abstracts.*

An Application of Automation in the Library: Indexing Internal Reports

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THE TASKS of indexing, storing and retrieving information in internal technical reports are among the important responsibilities of the Procter & Gamble Technical Information Service. In 1952, when our reports collection numbered about 28,000 documents, we became acutely aware of a need for more detailed indexing in order to achieve more thorough retrieval. We considered increasing the total number of subject cards per report. Drawbacks to this solution included the problem of increased space requirements for maintaining the cards. Also, the matter of properly delegating index terms to principal and subordinate positions was an ever-present, disturbing factor. The advantages of a type of unit-term coordinate index, described by Mortimer Taube and others,[1] appealed to us as a way of giving equal importance to each index term chosen for a single report. We decided to investigate some of the then-current proposals for nonconventional methods of indexing and to select one for experimentation.

During the SLA Convention in May 1952, Claire Schultz[2] presented a paper that described the application of random, superpositional codes to mechanically sorted punched cards for indexing literature in the library at Sharp & Dohme (now Merck, Sharp & Dohme). It seemed to us that this system might be what we were seeking, i.e., a combination of indexing by unit terms and retrieving by machine. Discussion with Mrs. Schultz during the Symposium on Machine Techniques in Scientific Information at Johns Hopkins University in March 1953, again stimulated our interest. Finally, as the result of a visit to Sharp & Dohme early in 1954, we were ready to decide a course of action.

A revision of a talk given before the Pittsburgh Chapter and published in the Pittsburgh Chapter *Bulletin*, vol. 27, no. 5, May 1960.

The system we selected is basically the one in use at Sharp & Dohme in 1954. There are minor differences, of course. For instance, we are using the system for internal reports, whereas Claire Schultz used it for published literature. Moreover, we necessarily introduced some modifications to suit our situation. However, I acknowledge gratefully our indebtedness to Claire Schultz and to Sharp & Dohme for their generous assistance in putting our system into operation.

Very briefly, the Sharp & Dohme system in 1954 consisted of: *1)* creating a dictionary of terms important as index concepts in the pharmaceutical literature, and assigning to each term a random code number; *2)* selecting the appropriate index terms or concepts in each current published article of interest when the article was reviewed by the library staff; *3)* mark-sensing the random numbers for these terms, as obtained from the dictionary, into an IBM card and then having the card punched; and finally *4)* searching these cards by use of an IBM machine when information was to be retrieved. As new terminology appeared in the literature, new terms were created and assigned random numbers in the dictionary.

Preliminary Decisions

As preliminary steps to work on our machine retrieval project, we made several decisions. We decided to start the project with reports written from January 1954 forward, eventually working backward too, but not farther back than 1950. As serial numbers for identification and arrangement of the reports, we decided to use a combination of the last two numbers of the year of the report with a number indicating the order in which the report was received. For instance, the serial number 54.1 was assigned to the first 1954 report received by the library.

We also decided to enlist the aid of report writers in our indexing. To assist us in catching the important ideas for indexing, we arranged that the company's written instructions to report writers be supplemented with instructions to include a list of index terms or concepts at the end of each report. These terms could be single words or phrases and they could be few or many—just so they would transmit to the library staff the writer's selection of the important ideas in his report. We felt that we could use these terms as such, or translate the selections into the terms we would have in our dictionary of terms. (In actual practice, we often think it necessary to add a few terms to the author's list.)

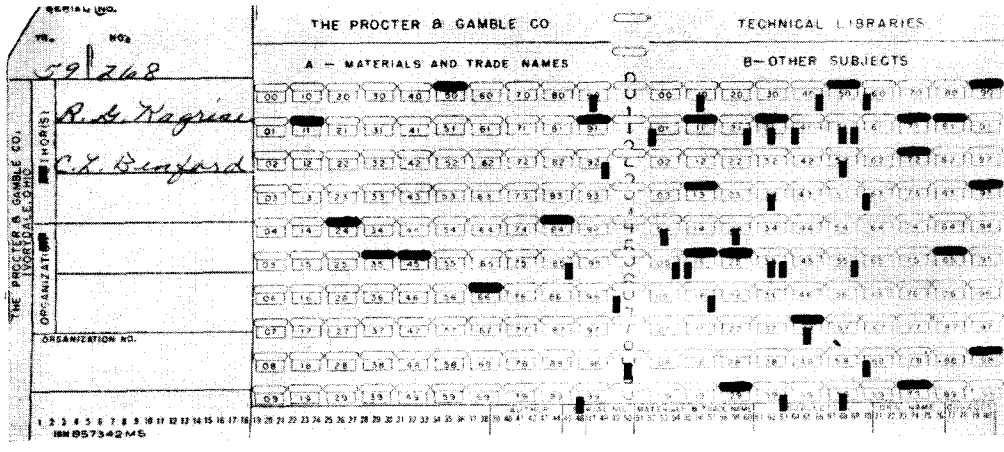
Finally, we decided to continue for an indefinite period our existing subject and author indexing of reports on conventional cards as well as to prepare coded cards for mechanical searching. In this way the uncertainties of the new system would not jeopardize our service.

Term Dictionary

With these advance steps decided and arranged, we were ready to create the preliminary dictionary of terms. Using the subject cards for older reports as a guide, we formulated a tentative terminology in alphabetical order. Of course, we combined the singular and plural forms of terms such as "germicide", "germicides." With some exceptions, we also combined the noun, verb and adjective forms of single terms. For instance, the words "moisture," "moisten" and "moist" were combined as a single set of terms. In cases where we anticipated much use for a term in its various grammatical forms, we split it. For instance, anticipating a number of reports on the mechanics of "detergency," in addition to many reports on "detergents" themselves, we treated these as separate terms. Synonyms, and in some cases near synonyms, were entered separately with a common code number.

At first we found a large loose-leaf notebook adequate for the alphabetical list of terms. Later, as numerous additions to the dictionary became necessary and as the need for definitions for terms as well as cross-reference information became evident, we transferred the information for each set of terms to a 4 x 6 inch card. The cards are kept on a large Mosler Revo Wheel, a revolving file that keeps them in order and secure but permits them to be readily removed at any time.

To each set of terms we assigned a random code number consisting of four sets of two digits each. This seemed, from experience at Sharp & Dohme, to be the minimum number of digits that could be used if many false sorts were to be prevented during searches. As our source of random numbers, we chose the compilation arranged by L. H. C. Tippett and edited by E. S. Pearson, under the title *Tracts for Computers. No. 15. Random Sampling Numbers* (Cambridge University Press, 1952).



IBM punched card developed by the Procter & Gamble Library for a single report.

Punched Cards

We designed our IBM card to utilize 20 columns in two fields of 10 columns each. This permitted room on the card for a left margin for writing in the serial number and author of the report and for two blown-up areas suitable for easy mark-sensing of the code numbers into the cards. The A field on the card is intended for terms for materials and trade names, and the B field is used for coding all other terms. Random numbers for each term bear the suitable A or B prefix. Our purpose in using two fields was to prevent overtaxing a too narrow area with punch holes and thus jeopardizing selectivity. Another advantage gained is that the same random numbers can be used twice, once in each field.

At first an IBM card of natural color was used for all reports. As the number of cards we coded increased, it became evident that savings in time could be effected if various subject fields were distinguished by color. Even at the rate of 450 cards searched per minute on the IBM 101 electronic statistical machine, too many cards could slow the searching procedure. Accordingly, we retained and continued to maintain the natural colored deck of cards as the reserve master set and, in addition, arranged for a duplicate deck in five parts as the operating deck. Subject divisions and colors for the five parts are *1)* reports on soaps and detergents on green cards, *2)* foods on salmon cards, *3)* oil processing on yellow cards, *4)* toilet goods on blue cards and *5)* paper and cellulose on red cards. If a report covers more than one subject field, two or more colored cards are entered into the file, in addition to the single card of natural color in the master set.

For searching we use the IBM 101 electronic statistical machine, which is rented for library use alone. It is housed in a closed area of the Ivorydale Technical Center Technical Library, where three girls (two of them chemists) are always on duty. Questions involving report searches from the Ivorydale location as well as from the two other P&G Technical Libraries in the Cincinnati area are transmitted to this central area. Searching is facilitated by a control panel board fitted on the IBM machine on which code numbers involved in a search can be dialed. A drawing of the control panel, originally designed by an engineer at Sharp & Dohme, was given to us by Claire Schultz when we started our project. Our own engineers built a similar but modified panel board for our use.

The IBM 101 electronic statistical machine with a specially designed dial control panel board.

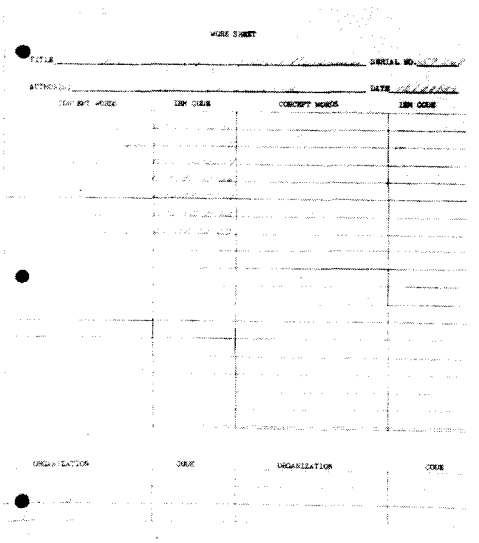
Development of System

Now, six years after we began the project, we feel we are finally in business as far as mechanical retrieval is concerned. We have about 2,000 sets of index terms in our dictionary. Approximately 6,000 of our reports are coded, but the rate at which reports are coding is now increasing. Our faith in the system is such that we discontinued conventional-type subject cards for reports last summer. Only author cards are now prepared in conventional form. Changes in terminology and procedure in the experimental stage slowed our program, but these are largely behind us. At present we are coding at a rate to keep us up to date on the indexing of the 65 reports or so received each month. Also, we have gradually worked back through the older reports to those for 1952.

One of the problems that delayed our progress was that of handling individual chemical names. At first we gave each chemical mentioned in a report a code number in

the A field. We found this procedure impractical, for example, when we encountered a report in which a chemist itemized results on as many as 50 or more compounds he had tested for germicidal properties. Many times individual chemicals are examined once for a special purpose and, proving unsatisfactory, they are never used or looked at again. To solve the problem, we decided that a chemical must be studied at least 10 times before it would be given a code as an individual. It could be coded on an IBM card under a chemical family code, as "silver and compounds" or "amines" but not as a specific chemical until it passed the "10-times test."

When first encountered in a report, the chemical is entered on a 3 x 5 inch card under its specific name in a chemical compound card index, with the report serial number below the name. After ten entries appear on this card, the chemical is assigned a place in the dictionary and a code number, the code number is punched into the IBM cards existing for the reports in which the chemical is mentioned and the card for the chemical in the compound index is discarded.



Typical work sheet filled in by a library documentalist as an aid in punching the IBM card and as a permanent record for each report.

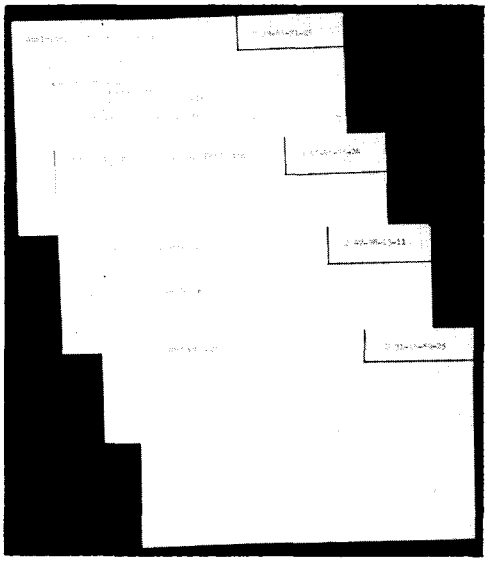
Indexing and Retrieval Procedures

At this point it seems appropriate to describe briefly the steps our library documentalists take both in indexing a report in the system as well as in retrieving information in filed reports.

As an example of a report coming to the file for indexing, I have chosen one entitled "The Determination of the Isomers of Methyl Ionone by Gas Chromatography." A library documentalist reads the report, consults the index terms listed at the end by the author and makes out what is called a work sheet. The work sheet serves as the permanent record of how a report is indexed as well as the record used by the person later mark-sensing and punching the IBM card.

Information on the sheet includes the title of the report, the author names, the serial number, the date, the index terms selected and their corresponding code numbers. At the very top of the sheet, the subject field (or fields) in which the report falls is indicated to show the color or colors of IBM card to be used for coding. Near the bottom of the sheet, any terms entered in the compound index are indicated. If the report concerns work done by or with a particular organization, such as work done in a particular factory, this fact is recorded at the bottom of the work sheet. Completed work sheets are sent in batches of one hundred to the company's data systems department, where the IBM cards are mark-sensed and punched. When returned, the work sheets are filed permanently by serial number in three-ring notebooks, while the IBM cards are added in random fashion to the existing collection of cards in the same color.

To show the procedures involved in making a mechanical search, let us assume that we are asked for all reports dealing with the analysis of perfume raw materials by use of gas chromatography. From the revolving wheel containing the dictionary terms, the documentalist selects the term cards for "Perfumes" (code A 50-45-35-24), for "Analysis" (code B 93-85-71-25), for "Gas" (code B 47-98-13-11) and for "Chromatography" (code B 31-15-50-25). She takes these cards to the dial board of the IBM



Sample index-term cards from dictionary kept on revolving wheel.

machine, adjusts it for the A field and dials the code for "Perfumes." Only the green and blue IBM cards need be sorted as the question is one falling in the soap and toilet goods field. She sets the machine in operation to select the cards on "Perfumes." When these are sorted out, she sets the machine for the B field, dials the three sets of B codes at one time and passes through the cards from the first sorting. The cards dropping out this time represent the final answer—they show the serial numbers of all reports on the subject of analysis of perfume materials by gas chromatography.

Testing System

To test the effectiveness of mechanical searching we carried out some time studies, including a study of the question just employed as an example of searching. Using the IBM system on this question concerning reports on analysis of perfume raw materials by gas chromatography, we found that we located references to seven reports on the subject in three minutes' time. Use of our conventional subject cards yielded four reports in ten minutes. The IBM method is well suited to this type of search, which involves the combination of several indexing terms for quickly locating a clearly defined area of information. Also, it is very productive on questions of a quite general nature, such as a request for all reports dealing with mildness of soaps and synthetic detergents. In cases of requests for a very specific topic, on which possibly only one or two reports exist, the conventional subject cards yield the same answer in less time.

In general, limited time studies of both indexing and retrieving, comparing conventional methods with the IBM method, have so far led to these conclusions:

1. About half as much time is required to index one report by the conventional method as by the IBM method. However, the number of direct index approaches or access points resulting is over eight times greater by the IBM method, thus promising greater retrievability.
2. With reference to retrieval, often more time is required to retrieve by the IBM machine than by the conventional subject card system, but usually with more complete results. In cases of limited subject searches, as well as of those for reports by specific authors or on specific subjects, the conventional method yields quicker results. However, in cases of requests for extensive subject searches or for searches in which several qualifying factors must be met, the IBM machine yields more information. This should be increasingly true as the number of reports coded for IBM increases.

Much work has been done on machine documentation since we started our project in 1954. Perhaps if we were initiating a program today we would choose a somewhat different method. However, most of the labor in establishing these newer systems concerns the selection of index terms, both for the dictionary and from the reports. Conversion to a modified system or adaptation to another type of machine should not be especially difficult, if we decide on a change.

CITATIONS

1. TAUBE, M., et al. Unit Terms in Coordinate Indexing. *American Documentation,* vol. 3, no. 4, Fall (Oct.) 1952, p. 213-18.
2. SCHULTZ, Claire K. Mechanized Punched Card Systems for Recording and Searching the Literature. Paper presented at the Special Libraries Association 43rd Annual Convention, May 26-29, 1952.

Second Thoughts on New Library Quarters

HAYNES McMULLEN, Professor of Library Science
Indiana University, Bloomington, Indiana

SINCE FEBRUARY 1958 *Special Libraries* has carried as a regular feature a series of articles entitled "Planning the New Library," and there have been similar articles in earlier issues. In these articles librarians have described their new library quarters, usually in glowing terms. If each of these articles had been written after the passage of a few years, would the terms have glowed so brightly? Have weaknesses appeared in the general arrangement or in the design of the furniture or the equipment to sadden the hearts of the once-proud occupants of these libraries? Do any of these librarians now have words of warning to pass on to others who may be planning new quarters?

To find the answers to these questions, I wrote, last May, to 19 librarians who have described their new quarters in *Special Libraries* during the past six years. Sixteen of them (or their successors) replied very graciously and fully about their satisfactions or dissatisfactions. The three who did not send usable answers had excellent excuses for not doing so—one was on an extended vacation, one was so busy planning still another move that he couldn't find time to write about the quarters he was then occupying and the third one had the best excuse of all —he hadn't yet moved into the space described in the article.

Most of the 16 libraries represented by the usable letters had been occupied for two or three years when their librarians wrote to me. The oldest library had been opened in 1954, and the youngest had been in operation for 12 months, so the principles their planners followed are ones likely to be still current. The kinds of equipment and materials used in these libraries are still available and likely to be used in the future—unless the librarians have found them unsatisfactory.

I asked each librarian five questions. Here are the questions and here, in summary, are the answers.

Which of the features described in your article in Special Libraries *have given you and your staff the most satisfaction? Which have pleased the users most?*

It is a great pleasure to report that all of the librarians are still very happy in their new libraries. Here is a typical answer, "We have been in our new quarters for three years, and it is surprising how very few changes and corrections we would make." The feature mentioned most often is not any single item of equipment or furniture but rather the over-all feeling of spaciousness and beauty. Several mention the pleasure the new color scheme brings to staff and readers, and two even mention the view from the windows as a prime source of satisfaction.

While some are happy because of spacious airiness, others are particularly pleased because certain portions of their libraries have been cut up into smaller units. Two report that their carrels are in heavy demand by users who want a degree of privacy, another mentions the popularity of conference rooms and a fourth mentions the convenience—and status value—of new private offices for staff members.

The item praised by the largest number of librarians is some kind of "index bar" where the more heavily used indexing and abstracting journals are shelved and easily consulted. The design of this equipment (or is it furniture?) varies from library to library, but five librarians are pleased to have it.

Almost any aspect of new quarters can give pleasure to someone. One librarian mentions the photoelectric cell at the door that automatically counts the number of persons using the room, and three librarians include their workroom sinks in the list of features that have given them cause to rejoice. Another puts high on her list of new blessings a delivery port between the outer corridor and her workroom whereby mail can be delivered without the disturbance of a mailman's trip through the reading area.

A few of the more satisfactory aspects of new quarters are ones that might be expected, such as air-conditioning, which reduces the need for cleaning equipment and materials, and new steel shelves that are easy to adjust. For the most part, the replies indicated that efforts made to plan unusual features have resulted in unusual satisfaction.

Which features (if any) have been disappointing to you, your staff, or users? From this I hoped to gather some pointers that might prevent other librarians from making mistakes in the future.

Thirteen of the 16 librarians were able to name disappointing features. It is difficult to classify the reply from a library with a large window area, whose librarian writes, "The sun does make it quite warm but why should I complain?" The causes for the complaints listed by the other 13 are all minor compared with the causes for rejoicing but are almost as varied as the sources of satisfaction.

A few mention lighting problems. Three have less light in some areas than they want, and three have more than is desirable at certain times in certain places. Two of the three with insufficient illumination have unsatisfactory recessed fixtures, which either will or should be replaced with hanging fixtures. Two of the three with too much light have found it hard to control the glare from large windows, and the third has found it impossible to darken the area where the Microcard reader is used.

Several librarians report that certain types of materials or operations requiring special equipment have quickly outgrown the space provided for them—an atlas case in one library has become too small, another has insufficient space in the area assigned for work with patents and in another the reference collection has rapidly outgrown the space allotted. However, none report that the facilities as a whole have been outgrown.

The only piece of equipment that has proved unsatisfactory in more than one library is wooden shelving with tilted bottom shelves. These tilted shelves make titles of books easier to read, but the friction coating that keeps the books from sliding backwards also makes it difficult to slide them from side to side when the occasion demands.

There is an unavoidable temptation to report reactions to two features, even though these particular items are not likely to be widely copied. A fireplace that really works was built in one library, in spite of the protests of the librarian who has since come to love it because of the pleasant air it adds to the room at all times and because of the warmth it adds on the occasions when the heating system fails. A circular staircase in the same library saves space but is unpopular with female members of the staff.

How do you feel about built-in equipment or furniture and any other specially designed equipment or furniture? Here I tried to obtain guidance on two points that have caused a considerable amount of joy or sorrow in the past.

Only eight librarians had anything to say about built-in equipment, and only one of these is unqualifiedly in favor. For the most part they feel it should be used only in extraordinary circumstances or should be avoided because the typical special library must expect to move from one location to another from time to time.

On the subject of other specially designed furniture and equipment there is more enthusiasm, but several librarians urge caution. Some are delighted with the appearance of specially designed reading tables and with the convenience of the unique shelves for indexing and abstracting volumes mentioned above. But one reports that chairs cannot be pushed close to her specially designed tables, and another reports that although the workmanship on her card cabinets is excellent, the slide devices for releasing the rods

in the drawers are inferior to those on cabinets from library supply houses. Another feels that her special equipment is not as useful as standard equipment would be, but it is more beautiful and, on balance, more satisfactory.

Two librarians offer suggestions that would seem to have value for anyone considering special designs. One feels that a diligent search is likely to turn up a firm that produces ready-made furniture or equipment of almost any description, and the other advises that specially designed equipment should be part of the plans only when the library's parent firm has someone competent to supervise its production.

Have materials worn well and been easy to keep clean? From this question I hoped to obtain hints about the lasting qualities of the many handsome new kinds of surfaces which bring pleasure to the eye and comfort to the body in these libraries.

Most librarians continue to be well pleased with the materials of the floor surfaces in their quarters. Those who go about their business on carpeting are the most enthusiastic, reporting that it wears well and is easy to clean. One who has a vinyl-asbestos floor wishes she had cork, and one who has cork reports that it requires much care but is worth the trouble.

Several mention their enthusiasm or lack of it in regard to table and desk tops. Two or three report that plastic table tops are excellent, another reports that an oil-finished wood does not show scratches and another is happy with glass-topped tables. One is dissatisfied with linoleum surfaces and wishes she had plastic. One warns against acoustical plaster on lower parts of walls because it is easily damaged.

Have there been any unforeseen developments which have made you wish you had planned differently? With my last question, I tried to find out how to predict the unpredictable.

Most librarians were able to foresee all changes that have taken place in their companies or their libraries up to the present. Only two unexpected developments are mentioned more than once. The rapid increase in the use of machines in library work is mentioned by two librarians, and unexpectedly heavy demands for carrel space is also mentioned by two librarians. One of the latter wishes he had carrels near the center of the stacks because the users now have to carry some books a considerable distance.

Taken altogether, the second thoughts about new quarters are happy thoughts. These librarians continue to be pleased with the comfort and beauty of their surroundings, and only a few have discovered important weaknesses in planning or in the execution of their plans.

CITATIONS

The people who answered my questions are in charge of the libraries described in the following articles in *Special Libraries:*

BROWN, Alberta L. The Upjohn Company Library. vol. 49, March 1958, p. 113-7.

FERGUSON, Elva M. Pennsylvania Railroad Company. vol. 49, May-June, 1958, p. 210-2.

FREEMAN, Elsa S. The Housing and Home Finance Library. vol. 49, July-Aug. 1958, p. 260-5.

GORMAN, D. W. The Ford Motor Company Engineering Staff Library. vol. 49, Feb. 1958, p. 66-9.

GRIFFIN, Marjorie. The IBM Research Library. vol. 50, July-Aug. 1959, p. 255-9.

HOLZAPFEL, Ruth. General Electric Co., Silicone Products Department. vol. 49, Nov. 1958, p. 434-8.

KIRCHHOF, Elizabeth H. and SPINA, Patricia J. Universal-Cyclops Steel Corporation Library. vol. 50, Feb. 1959, p. 72-7.

KNAPP, Paul. The Ohio Oil Company Research Center Library. vol. 51, Jan. 1960, p. 30-6.

KREITER, Carmen S. The Stuart Company Pharmaceutical Library. vol. 50, May-June, 1959, p. 202-5.

LECHNER, Marian G. Connecticut General Life Insurance Company. vol. 49, April 1958, p. 165-70.

PAGE, Henrietta M. Avco Research and Advanced Development Library. vol. 49, Oct. 1958, p. 391-5.

PETTENGILL, George E. American Institute of Architects Library. vol. 45, March 1954, p. 124-5.

SCHULZE, Else L. The Procter & Gamble Company M. A. & R. Technical Library. vol. 50, Jan. 1959, p. 20-5.

WAHL, David R. The Wix Library of the Weizmann Institute of Science. vol. 50, March 1959, p. 123-31.

WALFORD, Bess P. and MACE, C. V., Jr. Philip Morris Research Center Library. vol. 51, April 1960, p. 200-4.

WILKINSON, William A. Monsanto Chemical Co., Organic Research Library. vol. 50, Dec. 1959, p. 498-504.

An American Publisher's Impressions of the Soviet Union

EARL M. COLEMAN, President,
Consultants Bureau Enterprises, Inc., New York

AT THE SAME time Premier Khrushchev was sailing for New York and the United Nations aboard the "Baltika," Mrs. Coleman and I were flying into Kiev airport on our way to Moscow. Upon arrival the Soviet customs inspector asked us only one question, "Do you have any books?" The single, most vivid impression we have of our stay in the USSR is the intensity of the Russians' relationship with the printed word.

It is as difficult to go to the Soviet Union without preformed ideas as it is to be a venireman for some sensational trial. It seemed to us, however, that we had to be as close to clean blotting paper as possible if we wanted to soak up any real impressions. I do not know how well we succeeded because too much of what we saw conflicted with too much else. The people, for example, have a drab look to Western eyes, but on the other hand the sheer cubic footage of new housing is staggering. Our first four days in Moscow were filled with red tape, but at the end of our visit we saw (without a guide) an opera performed by an amateur group in the Workers' Club at the Kirov Locomotive Factory. Although there seemed to be no shortages, equally there seemed to be no plenty. In many European countries, such a situation produces a close-fisted attitude among the people; we found the Russians to be open-handed. I suppose we found what tourists find in any country when they leave their provincialism behind—a country different from our own.

Twelve years ago, Consultants Bureau initiated the first cover-to-cover translation of a Russian scientific journal, and it is today the largest publisher of Soviet scientific books and journals in English translation. Mrs. Coleman and I went to the USSR in order to formalize personally our four-year relationship-by-correspondence with the official Soviet book agency, Mezhdunarodnaya Kniga, to receive presentation copies of the first scientific book ever published simultaneously in Russian and in English in two hemispheres, and to meet as many scientists, heads of publishing houses and directors of scientific institutes as we could in the few weeks we had allotted ourselves.

Soviet Book Agency

As readers may be aware, our relationship with Mezhdunarodnaya Kniga has involved its granting Consultants Bureau the exclusive world rights in the English language to important Soviet scientific journals and books. In June 1960, the agreement we originally made with the Soviets in 1958 for the rights to journals was renewed for a two-year period. (During 1961, Consultants Bureau will translate on a cover-to-cover basis 34 Soviet scientific and technical journals.) For the past few years, we have had an informal agreement with Mezhdunarodnaya Kniga whereby it granted us the rights to books on an individual request basis. Due to the steady growth of this part of our publishing program, we went to the USSR in the hope of signing a long-term contract with the official Soviet book agency for such book rights.

On our first contact with Soviet officialdom, we chanced upon an interesting concept—one that might be expanded with some profit. During the course of our early conversations with executives of Mezhdunarodnaya Kniga, we brought up one of the most perplexing problems we had encountered in our correspondence with them. There had been occasional instances when we were refused the rights to translate a certain journal. This refusal always came to us in the form of a rather brief letter stating that they re-

gretted being unable to grant us rights. Needless to say, we were curious to know the reasons for these isolated cases but were never enlightened to our satisfaction, despite repeated queries.

Then at last we were in a position to pursue the matter personally, and we took the opportunity of asking about a particular journal, the rights to which we had not been able to obtain. The Mezhdunarodnaya Kniga officials were obviously amazed at our persistent curiosity but eventually told us that they had not granted the rights because publication of the journal in question was not contemplated until late 1961. I commented that a great deal of time and annoyance might have been saved had they informed us of this in their very first letter on the subject. Their response was, "Why should we have told you *why?* We told you that you could not translate the journal."

At this point, Mrs. Coleman and I felt that we were running up against the stone wall of "Russian intransigence." Yet our feeling was that in this case there was no desire on Mezhdunarodnaya Kniga's part to be unilateral, since it finally did grant us the rights to the journal—when, as and if it is published. Rather we felt that instead of dealing with a society hundreds of years old, with people who were skilled in sophisticated reasoning and communication, we were, in reality, dealing with a 40-year-old society whose members were just not accustomed to conducting a Western-style business relationship.

The same question occurred again and again during our first five meetings with Mezhdunarodnaya Kniga, "Why must we tell you *why?*" At our final meeting, however, one of the top officials said to me in a triumphant tone, "We know how to deal with you now, Mr. Coleman. When we write to you from now on, we will tell you 'because, because, because.' And if there are no becauses, we will make them up!"

This unexpected wit dispelled yet another preconceived notion I had had—that Russians have no sense of humor. We found that a humorous approach worked wonders with them. For example, we lauded the creativity of planning evidenced by a new Seven Year Plan. I pointed out that, of course, Consultants Bureau too believed in planning, but that since we were a much smaller organization, we wanted to start off a bit less ambitiously with a Six Year Plan in the form of a six-year contract granting us the rights to translate and publish the most significant Russian scientific books. Their first reaction was that six years was too long a term for a contract. But the humor of the request helped to persuade them, and we actually did sign a six-year contract with the official Soviet book agency on extremely favorable terms.

As a result of our many meetings, Mezhdunarodnaya Kniga came to understand our problems very well, and this understanding is reflected in the new contract. They are now fully aware of the necessity of making Soviet scientific information more rapidly known to the Western world. To this end we are to be supplied with a constant stream of information from scientific institutes, presses, scientists and Mezhdunarodnaya Kniga itself. Thus Consultants Bureau will be in a position to know well in advance what important books are coming out in the Soviet Union. We shall in the future be able to publish translations of significant monographs, symposia, conference proceedings and collections of articles, all dealing with highly specialized scientific and technical subjects, with no more than a six-month delay, since the Soviets will expedite the dispatch to us of page proofs, photographs and all the other necessary materials.

General Publishing Scene

During the course of our negotiations with Mezhdunarodnaya Kniga, we were also meeting with the heads of scientific institutes, some leading scientists and with the top officials of 14 presses. Thirteen of these presses publish only scientific and technical material. Somewhat ironically, it was the one "general" press that understood our problems the best. This was the Foreign Literature Press, which deals exclusively with the translation into Russian and publication of non-Russian books, scientific and otherwise. We commiserated for several hours with the director of this press over the problems of finding

capable and reliable translators, coping with considerably higher production costs than other presses, relying on smaller markets, the necessity for higher prices than those of original-language material and similar difficulties. This director's story mirrored ours, and it was comforting to discover that in spite of the evident efficiency of the Soviet distribution system, this publisher too runs into troubles much the same as those that confront Consultants Bureau with translated scientific material.

The mass distribution system, which I mentioned above, is probably the most striking aspect of Soviet publishing. There is hardly a downtown street in Moscow that does not have at least one bookstore on it, and perhaps book stalls on the sidewalk as well. Of course, that is something of an exaggeration, since in 1957 there were some 20,000 bookstores and stalls in the entire Soviet Union. (I do not have more recent figures.) Nevertheless, the impression we received was of books, books, books. I must admit in all fairness, however, that a journeyman architect might instead have seen buildings, buildings, buildings.

The director of press after press pointed with pride to runs of scientific books on the research and post-graduate level of as many as 50,000 copies and to the fact that prices of such books range from about $1.25 to $2.50. When I challenged the profitability of such ventures, one press director asked me, "If I sell 50,000 copies at $2 each, can I make a profit?" I was forced to admit that since advertising plays no part at all in his case and since his distribution is already set up for him, he will indeed make a handsome profit. Part of this profit is retained by the press itself, part of it goes in taxes to the state. Although I do not understand the complicated mechanism, I was informed that some of the annual profit is passed on to employees in the form of raises and bonuses or housing built by the press.

The insatiable market for these books is almost unbelievable! I heard that close to 60 million people of all ages are currently taking formal educational courses of one kind or another. Mrs. Coleman and I will never forget the young woman construction worker who entered the Academy of Sciences bookstore on Gor'kii Street, where only highly scientific material is sold. She was evidently on her lunch-hour and still wearing her semi-uniform of quilted jacket and muddy boots. To our amazement, after examining several titles, she chose a tome on the use of ceramics in industrial engineering.

I also recall walking along the street near the Metro station in Moscow where, along with women's magazines, newspapers and novels, gigantic English-Russian dictionaries were being sold to avid commuters from open-air book stalls. When I asked our guide if many people were studying English, she said it was her belief that hundreds of thousands were. She commented that I must have noticed that at least half the people we had spoken to knew English to some degree. "We even have a television course to teach English," she added. I knew that in New York we too have a Russian television course —at six o'clock in the morning—and I asked her when the English course was given. Her answer was, "At seven o'clock at night, because almost everybody is home then." I thought of "prime time" and made no further comment on that subject.

It was an unfortunate omission that we could not visit any libraries because our schedule was so very crowded. To say that we passed them on the streets and that they were pointed out with great pride, with numbers of volumes being rattled off and the great size of the buildings being demonstrated, is to tell a very skimpy story indeed.

Nothing exceeded the warmth of the greeting we received in Leningrad, where, as a result of months of close cooperation between the Institute of Silicate Chemistry, the Academy of Sciences Press and Consultants Bureau, *The Structure of Glass* was published simultaneously in Russian in Leningrad and in English in New York. The proceedings of this significant conference on the glassy state were translated by Consultants Bureau piecemeal as it received the Russian page proofs from Leningrad. On October 20, 1960, for the first time to our knowledge, a Russian scientific book was

published on the same day as its English translation. Less than four months had elapsed from the receipt of the first batch of page proofs of this 492-page book to publication of the finished translation, bound and jacketed. This publishing feat amazed the Soviets, and, I must confess, even somewhat amazed us. Because of the excellent cooperation we received in the preparation of this volume, we are planning to publish the proceedings of many more important conferences, and where deemed necessary, we will try to produce these simultaneously with the Russian originals.

Looking back on our USSR trip, two facts seem particularly important because of their possible implications. One is that the new contract granting us the exclusive rights to outstanding Soviet scientific books extends for six years. This would seem to indicate that the official Soviet book agency anticipates a prolonged period of free trade between the USSR and the United States. One can only hope they are well informed! The second fact is that the U-2 incident occurred during our cooperative efforts with the Leningrad scientists toward the simultaneous publication of *The Structure of Glass*. When we read of the political furor caused by this incident, we had many doubts that we would continue to receive such close cooperation from the Soviets. What relief then when the flow of Russian material kept coming in and our relationship with the Leningrad scientists and publishers remained friendly.

At the outset of our stay in the Soviet Union, I must admit that I behaved "like a tourist"—insular, my-own-view-minded, unwilling to accept anything different and with something of a chip on my shoulder. At our first meeting with Mezhdunarodnaya Kniga, it became apparent that one of two things could happen. We could get nowhere if we clung to our prejudices. Or I could *try* to make things go smoothly. I had to decide then whether the goal—an excellent contract, inherent in which would be rapid dissemination of scientific information to our own American scientists—was more important than the cherishing of long-held views. I believe the choice made will bear fruit for all.

SPOTTED

● Those who do not regularly see "Science" are urged to seek out the October 21, 1960 issue, which contains a highly informative article by Don R. Swanson entitled "Searching Natural Language Text by Computer." The author summarized an information retrieval study supported by the Council on Library Resources, Inc. and describes preliminary experiments with text searching and automatic machine indexing as a practical approach to the basic problems of library automation. ● Microfilm has become a medium of primary publication with the release of "Histology of British Mosses" by Educational Productions Limited, East Ardsley, Wakefield, Yorkshire, England. The typewritten and hand-painted manuscript prepared by Professors Else and Trotter was published in full and in color on microfilm and is available in no other form. This is an important "first" in the history of book publishing. ● M. C. Pottinger, a Scottish librarian who recently visited the Soviet Union, has reported that libraries in Russia may be free but to borrow books is neither a simple nor entirely private transaction. Soviet readers are issued tickets on which they must record their names, nationality, party membership, occupation, education, home address, place of employment, telephone number and details of their identity papers. In addition the tickets have space for recording titles of the books a reader has borrowed. ● Another library visitor from the British Isles, Anthony Thompson, described his impressions of Soviet libraries in the June 1960 "Aslib Proceedings." He commented: "The first thing one saw on entering a library was a notice, 'Will you please undress!' This meant, of course, that one ought to take off one's fur coat, fur hat, galoshes and so on." ● People may scoff at the idea of machine translations, but human translations can be pretty confusing, too. Witness, for instance, this communication in an English version of a Japanese laboratory report: "If you want to get the following issue continually please write to us in order that your correct address may be filed by us."

The Care and Feeding of Librarians

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LIBRARIANS dealt with in this discussion will be assumed to be in a state of captivation. This should not be confused with captivity. Librarians are not ordinarily born in captivity and are rarely trapped or otherwise forced into library service. They are not even naturally wild, though they have been known on occasion to act as though they were. Such instances should not be misinterpreted as representing a reversion to an original state of wildness. Instead, as is the case with many other species, a temporary manifestation of wildness is most likely to be induced by some sort of provocation or frustration. For example, librarians have been known to remark that so and so, or this or that, is driving them wild.

Fortunately, only a small portion of such threatened excursions into wildness materialize and very few reach the indicated destination. Even then, the condition of wildness is usually temporary. Permanently wild librarians are very rare indeed. Consequently, wild librarians will not be dealt with further in these remarks. Attention will be concentrated on "captivated librarians."

The principal basis for believing that librarians must be regarded as being captivated is the fact that otherwise it would be difficult to account for their docility, even under circumstances they could not be expected to tolerate unless captivated by the more favorable aspects of their existence. Pertinent to this remark is the fact that such favorable aspects are mostly of the spirit and rarely in the area of "creature comforts."

Working Quarters

Librarians very frequently are required to carry on their activities under difficult conditions. The nature of their tasks is such that the space required for them must inevitably increase in what may approach a geometric progression. However, it does not follow that the space so required is likely to expand at the same rate.

In the worst cases, the quarters assigned to librarians are what are left over after all other needs for space have been provided for. By occasional coincidence, an allocation of space bears a reasonable resemblance to what it should be. These more or less fortuitously harmonious situations are likely to be of short duration, however, since libraries established in remnant space rarely, if ever, have any room for expansion, even though it is inevitable that the number of librarians, and what they deal with, are sure to grow.

Since libraries, librarians and what they do continue to increase in importance and popularity, it is becoming more common to make provision for them in building plans. Consequently, the allocation of space in new buildings is likely to be more adequate, at least at the start. Nevertheless, the rate of expansion of the volume of things to be handled by librarians is likely to continue to be greater than space-allotment planners will be willing to recognize or manage to have authorized. The usual result is that librarians have to become accustomed to living in crowded quarters with little real hope of early relief.

It should be evident from the foregoing that, as a class, librarians have had to cultivate the ability to carry on their assigned tasks in offices, and among stacks, under conditions that might reasonably be expected to lead to claustrophobia. They have had to learn to tolerate their co-workers breathing down their necks. The implication of this in terms of the effects of feeding habits on the nature of the individual breaths involved need not be more than hinted.

Paper presented at the Metals Division Fall Meeting, October 21, Philadelphia, Pennsylvania.

So far, there has been no indication that this acquired characteristic of librarians has led to their being recognized as being especially adaptable to travel in submarines or even space capsules. Perhaps, still secret plans for putting animals into outer space contemplate the use of librarians as the next step beyond the Soviet dogs and the United States monkeys. This, of course, would represent a shift in the basis of choice from expendability to adaptability, since no one should feel that librarians are expendable, except in rare instances when the previously referred to condition of wildness shows signs of permanence. Even here there is a question that a wild librarian would retain the other characteristics required. Some other exposure to the chance of permanent removal would, no doubt, be more attractive.

There are two impending problems that must be given appropriate attention. One of these is frequently referred to as the explosion of population. The other is the flood of literature. A question arises as to which danger will prevail. There is a chance that the tremendous accumulation of published matter will pre-empt the space required for an ever-expanding population. One solution may be to relegate librarians and their hoarded literature to outer space where, by the miracles of modern communication, they can continue to discharge their important functions of responding to requests for excerpts from their spatial store of the world's knowledge.

Sustenance Decisions

To a large degree, librarians have little choice of what is sent to them for nourishment. As a matter of fact, the nourishment of librarians is a very minor factor in determining what they receive. This is especially the case with technical libraries in which items of usual human interest represent only a small portion of the contents. Technical librarians are basically expected to act as custodians. In this guise they are required to deal with material covering an extremely broad range of quality. At one end of the spectrum there are accessions of tremendous and permanent value. At the other end they regularly get a good deal of what is little better than trash. They are supposed to be able to make the necessary distinctions and deal with the material accordingly. This is not too difficult at the extremes but presents many problems, especially near the trash end of the spectrum.

Frequently, the people whom librarians serve find on their desks material of questionable future value. Rather than running the risk of discarding something that might conceivably be wanted again and instead of throwing it into the waste basket immediately, it is much easier to scribble "library" on the questionable document and transfer the problem of disposal to the librarian. This recognizes the superior judgment of librarians but, at the same time, exposes them to risks of recrimination when, at some future date, an item that is discarded by the librarian acquires a value not recognized, or recognizable, when it first appeared.

The donor runs no similar risks. If he never asks for the item, the fact of its disposal never becomes a matter of issue. If he does ask for it, he can assert that if he hadn't recognized its value in the first instance, he wouldn't have sent it to the library. The librarian is rarely in a position to challenge such assertions, since even a very sudden incidence of value of something that has been thrown away frequently has a retroactive effect, at least in the mind of the donor. He is likely to become sure that he recognized the future worth of the item at the time he rid himself of it and may upbraid the librarian for failing to be as perceptive.

The librarian is unable to apply the obvious remedy against such unhappy developments by storing for retrieval everything that reaches the library. It is usually difficult to find room for what obviously should be kept, let alone material of highly questionable character.

The problem is complicated further by the fact that simple storage is not enough. Possible retrieval must always be provided for by appropriate indexing and guides to storage location. This requires as much attention to items that may never be heard of again as

to material likely to be asked for frequently. So the librarian is constantly called upon to make decisions too difficult for even those who should be better informed, with the continual risk of being scolded when the decision is wrong and with little expectation that a difficult, correct decision will be praised, even if it should happen to be recognized as such.

A natural result is that librarians must develop a great tolerance for abuse along with indifference to criticism. Even so, there usually remain enough chinks in their armor to permit pain to penetrate under particularly aggravating circumstances. Likewise, even with their tough veneer, most librarians are sensitive to the warming effects of praise if it ever should be bestowed or even suspected. Unfortunately, the incidence of praise is generally less than that of abuse, largely because praiseworthy behavior is considered to be no more than what should be expected.

Librarians are frequently associated with groups of specialists in many fields, each with its own jargon and family of terms unfamiliar to people outside these fields. Nevertheless, a librarian is supposed to be at home with all these dialects and, not only able to read them, but translate them into abstracts intelligible to other nonspecialists. This subjects librarians to a very heterogeneous diet which may include material that is practically indigestible. The frequent incidence of analogues of ulcers and other ailments, of what TV announcers call the lower digestive tract, is therefore understandable.

Pleasures and Perils

Naturally occurring problems of the types that have been mentioned have required the development of more and more complicated schemes for indexing and filing material received for storage. Occasionally, this has led to situations where librarians have become so entranced, or fascinated, by the beauty and challenges of indexing and filing schemes, that they have lost sight of their purpose.

Some have been known to make a sort of a game of cross-indexing. The object of such a game is to find the largest possible number of ways to combine words to describe a particular subject or incident and to produce a cross-index file card corresponding to each variation of the theme. An example of such an exercise in cross-indexing, apparently for its own sake, is an instance where a file clerk was able to produce 23 cross-index cards covering all possible ramifications of the time, place, subject matter and other aspects of an invitation to give a technical talk—that had to be declined. There is no time to contemplate what additional furor of cross-indexing might have resulted if the invitation had been accepted and the talk prepared!

Such preoccupation with indexing may occasionally be at the expense of time that might otherwise be devoted to proper storage and retrieval activities. This is most likely to lead to unhappy relations between librarians and those they serve when someone has to trade a beautiful set of cross-index cards, related to material of doubtful value that isn't wanted, for an inability to find the item desired immediately.

The most important step in avoiding such difficulties would be more discrimination in selecting what is sent to the library for disposal. Next would be the cultivation of restraint in cross-indexing beyond real needs, recognizing, of course, the necessity of anticipating the many strange ways of describing any given subject that may appear perfectly normal to the person who is seeking something. This becomes a particularly difficult problem when the seeker is not quite sure of what he wants or how to ask for it. Of course, this lack of assurance is rarely evident at the time the request is made. The librarian must assume at the start that the need has been described precisely and undertake some explorations of other possibilities only after having wasted a good deal of time on the basis of the original premise.

Librarians as a class are being subjected to the increasing peril of automation in the form of mysterious electronic devices designed to perform many of the functions of librarians. While these may achieve some measure of success in the least demanding areas of library activities, they are not likely to displace librarians in their most valuable

functions. Someone will still have to have a great deal of knowledge and exercise fine judgment in feeding the monsters and retrieving what they have stored away without digestion.

Another aspect of this matter is suggested by the couplet:

Without any curves and without any curls
How could they replace so many nice girls?

In closing, it should be understood that the details touched upon in these remarks do not reflect any first-hand experience as a librarian. Rather, they have been based on actions on the other side of the fence of which the speaker himself has probably been guilty from time to time. It can be assumed that behavior resulting in provocation and exasperation of librarians is usually inadvertent and without malice.

General recognition of possibile deficiencies in the care and feeding of librarians, such as have been touched upon here, may reasonably be expected to have effects beneficial to all concerned. Librarians can be expected to respond to TLC (tender loving care) by increasing their tolerance of mistakes and by serving their self-styled masters with even greater efficiency than they have demonstrated under conditions of unwitting, yet too frequent, torment.

United States Naval Observatory Library: Resources and Treasures

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THE EARLY history of the United States Naval Observatory is inseparable from that of several other early personages and institutions. Ferdinand Rudolph Hassler, selected by President Jefferson in 1807 to make an accurate survey of the United States coastline, drew up a plan of operations that included construction of two astronomical observatories. Although they were never established, it had been contemplated that one of them, to be located in Washington, D. C., would house the chronometers and library of the Coast Survey. On a trip to England and the Continent between 1811 and 1815, Hassler purchased instruments for the survey and books for the projected observatories. These government purchases were deposited with Robert Patterson, Director of the Mint in Philadelphia, who was considered the originator of the survey project.

A list of the books purchased appears in "A Report of Secretary of the Treasury, Relative to the Measures Which Have Been Taken to Complete an Accurate Survey of the Coast of the United States . . . April 4, 1816." Of the titles cited, it appears certain that a number of them are in the present collection of the Naval Observatory. The handwriting of "Library for the Survey of the Coast," which precedes the title page of the Observatory copy of *Tabulae Veneris* by Bernhard August von Lindenau, 1810, corresponds with that of "Survey of the Coast" written in a letter by Hassler to Jefferson, dated January 5, 1820. This letter is in the Jefferson collection at the Library of Congress.

Development in the 19th Century

Thus, a collection of astronomical books had begun to materialize before a national astronomical observatory existed and even before the need for one had been voiced publicly by Presidents James Monroe, in 1812, and John Quincy Adams, amid political derision, in 1825. A select committee of President Adams reported on March 18, 1826, that the government already had the needed instruments and books for the establishment of an astronomical observatory. However, no immediate action was taken on this report. The United States Naval Ob-

Based on a talk given before the Military Librarians Group of SLA's Washington, D. C. Chapter on February 9, 1960.

servatory did not actually come into being until 1830, when an order of the Secretary of the Navy established the Depot of Charts and Instruments. The original functions of this Depot were to collect and correct nautical charts, books and instruments used by the Navy Department. Prior to 1830, the necessary books and charts, largely in foreign languages, and the instruments for the Navy were obtained by purchase from foreign governments or from private dealers by the commanding officer on the Board of Naval Commissioners.

The Mallory Act of 1842 provided a building for the Depot of Charts and Instruments. Plans were submitted, which included an astronomical observatory, and the new buildings were constructed under the direction of James Melville Gilliss. In 1844 this institution was given the name of the United States Naval Observatory. Originally located "at the foot of Twenty-Fourth Street," it was relocated at its present site in 1893.

The rotunda at the east end of the present main building was designed as a library, although it frequently impresses visitors as having been built to house a telescope. The attractive and unusual circular reading room rises two stories high, with a fountain in the center.

Before setting out on an official visit to the observatories of Europe in 1842, Gilliss submitted a procurement list that included an item for books. The nucleus of the Naval Observatory library was acquired on this trip, about which he reported as follows:

"In token of the interest and gratification at the establishment of the Institution felt by distinguished men abroad, the Library of the Observatory received, among its first stores, contributions of 175 volumes from the Royal Society, Royal Astronomical Society, the English Admiralty, and the East India Company, and from the Astronomers Royal at Greenwich, Berlin, Brussels, and Munich, and the directors of other distinguished observatories. The United States Observatory was immediately placed upon their exchange-lists. Seven hundred volumes of standard works were purchased."[1]

Lists of the books presented and of the books purchased appear at the close of the following account of the library's origin:

"To a list of the astronomical books contained in the library at the High School Observatory, Philadelphia, (for which, and many most valuable suggestions, I am under great obligations to Mr. S. C. Walker,) such additions were made by Messrs. Airy, Schumacher, Encke and Lamont, as they deemed most essential in beginning a library; and the English, French, and German publications, were purchased at London, Paris, and Leipsic [sic] respectively. Professor Schumacher advised that the Italian books should be ordered direct from the Mediterranean . . .

"Many of the most costly books were obtained at stores, where only second-hand copies are sold, and at sums varying from one-eighth to one-fourth of their original prices . . .

"Much interest was evinced in the success of the naval observatory by the distinguished *savans* I had the honor to meet; and, in token of their gratification at the establishment of an institution by the United States, where science will be prosecuted, they have contributed to its library the following books . . ."[2]

The exchange of publications issued by observatories and other scientific institutions has continued to be the principal means of growth of the collection. The first time "Books for the Library" of the Naval Observatory appeared in an annual legislative bill was in the Act of March 3, 1871. The first specific appropriation, $1,000, appeared in the Act of May 4, 1879.

Collections

By 1960 the library contained over 55,000 cataloged volumes, plus many periodical sets. There are exhaustive holdings in the literature of astronomy. The mathematics collection, especially strong in analysis, is renowned for its value in reference work. Extensive series of publications by academic societies include those of the Royal Society of London from 1665 to 1932, Académie des Sciences, Paris, 1733 to date, Akademie der Wissenschaften, Berlin, 1745 to 1948 and Akademiia Nauk SSSR, 1728 to 1949.

In the collection there is the first German scientific periodical, *Acta Eruditorum,* 1682-1731. The library has the continuation, *Nova Acta Eruditorum,* from 1732 to 1763. Other important periodicals include *Annales de Chimie et de Physique,* 1789-1929, and *The Philosophical Magazine,* 1798-1946. Numerous articles of special interest to astronomers are contained in these publications. The first

paper to appear in *Philosophical Transactions,* volume one, 1665, concerns astronomy. In this series are a large number of astronomical articles by John Flamsteed, Edmond Halley, John F. W. Herschel and Isaac Newton.

Long sets of nautical almanacs from most foreign countries include those of Great Britain, 1767 to date, Germany, 1776 to date and France, founded in 1679, which is almost complete from 1772 to date. International cooperation in the exchange of computations for astronomical almanacs has existed since 1912. The International Astronomical Union sponsored the publication of *Apparent Places of Fundamental Stars* from 1941 to 1959; since 1960, this work has been produced by Astronomisches Rechen-Institut, Heidelberg. Beginning with the 1960 issue, *The American Ephemeris and Nautical Almanac,* the principal publication of the Naval Observatory, was unified with *The Astronomical Ephemeris* (previously *The Nautical Almanac*) of Great Britain.

In addition to astronomical ephemerides, the library has a strong collection of star catalogs and charts, observatory publications, bibliographical reference works in astronomy, the complete works of astronomers and mathematicians and mathematical tables. Detailed information about observatories and astronomers and astronomical facts not easily located are incorporated in a card file of literature abstracts and references. Selective reference and bibliographical services to specialists are provided. Bibliographies on the basic literature of astronomy[3] are often requested by persons currently assigned to develop working collections in astronomy.

The resources of the library make reference work especially rewarding. Typical reference questions concern such facts as: the official action ending the use of the astronomical day; coordinates of the observatory erected in Independence Square to observe the transit of Venus in 1769 (This observatory attained greater prominence as the structure from which the Declaration of Independence was first read publicly.); and literature about the surface of the moon, related to the problem of constructing an observatory thereon.

A distinguished reference work in astronomy, and relevant to allied fields, is the *Astronomischer Jahresbericht.* Since 1899 this almost complete bibliography has indexed, on a yearly basis, the astronomical literature from all countries. It is classified, includes many abstracts and readily leads to tabular data concerning the results of observations of star positions, variable stars, comets and minor planets. The library collection of bibliographies of astronomy is representative. The 19th century catalogs of astronomical libraries, such as those of the Royal Astronomical Society, London, and the Royal Observatory, Brussels, have been helpful in verifying obscure titles.

Rare Books

The collection of 500 rare books printed before 1800, a delight to the modern eye, is useful to scholars and authors of today. The earliest of six incunabula is a first edition of *Poeticon Astronomicon,* by Caius J. Hyginus, which was printed in 1482. One of the most beautiful books of the 15th century, illustrated by Erhard Ratdoldt, it became a best seller during the later Middle Ages and the Renaissance. The woodcuts, representing constellations, were used again by Ratdoldt in the Observatory copies of three works by Albumasar, printed in 1488 and 1489. The first printed material on algebra, with marginal woodcuts of computations and diagrams, is in *Suma de Arithmetica,* by Luca Pacioli, dated 1494. There is an incomplete copy of the Alfonsine tables, *Tabule Astronomice,* which was printed in 1492. *Organum Uranicum,* by Sebastian Münster, appeared in 1536. The final section of this work, *Organa Planetarum,* contains elaborate woodcuts with movable disks representing the motions of the planets and the phases of the moon. Fine colored woodcuts appear in *Eclipsium Omnium,* by Cyprian Leovitius, 1556.

Among other early books are *Machina Coelestis,* by Johannes Hevelius, in two parts, 1673-79. The second part of this work is extremely rare. Almost the entire edition was destroyed when a dismissed servant returned to set fire to Hevelius' house. There are also rare editions of the works of Apollonius of Perga, Ptolemy, Joannes de Sacro Bosco,

Tycho Brahe, Copernicus, Galileo, Johann Kepler, Isaac Newton, Bartholomaeus Pitiscus and Giovanni B. Riccioli.

One of the earliest gifts to the library, presented by the widow of James M. Gilliss, Superintendent of the Naval Observatory, 1861-65, "supplied in several cases vacancies in valuable series which could have with difficulty been supplied by inquiry and outlay."[4] During 1930-31, 685 volumes accumulated by Asaph Hall, 1829-1907, of the Observatory staff, were presented to the library by his heirs. The separate collection of the Nautical Almanac Office, consisting of about 4,000 volumes, was consolidated with the library of the Observatory in 1909.

Functions and Professional Growth

The mission of the library is to maintain professional and technical books and publications for the use of the scientific personnel of the Naval Observatory, other government agencies, scientists, students and qualified individuals. An early statement about its use is cited in Weber:[5]

"On April 12, 1892, a joint resolution was adopted (27 Stat. L., 395) providing that the 'facilities for research and illustration' of certain governmental collections established in the City of Washington for the promotion of knowledge shall be made accessible to the scientific investigators and to students of institutions of higher education incorporated under the laws of Congress or of the District of Columbia. The Naval Observatory is one of twelve government institutions mentioned in the resolution. An act of March 3, 1901 (31 Stat. L., 1010, 1039), provides for such access in more general terms."

The collection is widely used by others for verifying references and for interlibrary loan.

The library collection was first classified by Edward Singleton Holden in 1879,[6] when an author card catalog of the 8,500 volumes was begun. In addition, a complete index to the publications of the Observatory from 1845-75 was compiled.[7] The library is now arranged largely according to the Library of Congress classification system.

Persons who acted as librarians from the time of the library's establishment were, in successive order, mathematicians, astronomers and Naval officers. From 1881-87, the library was in charge of officers stationed at the Naval Observatory. From 1887-89, William Dennis Horigan, who had been an assistant in the library for several years, performed the duties of an acting librarian. Although no salary for a librarian was allowed at that time, Congress created the position of assistant librarian on July 1, 1891. Horigan was appointed to this position. He was eventually placed in charge of the library under the general supervision of a library committee, and he served 42 years.

The library is of particular importance for astronomers. In fundamental astronomy, one can seldom make experiments. Observations are of prime importance; sometimes an observation can never be repeated. Thus, reliance must be placed upon records of past observations. A great many of the publications received in this library never become obsolete. The United States Naval Observatory is an appropriate institution to preserve and to make accessible an exhaustive collection of astronomical literature from the earliest times to the present.

CITATIONS

1. NOURSE, J. E. *Memoir of the Founding and Progress of the United States Naval Observatory* (U. S. Naval Observatory. Washington Observations, 1871, Appendix IV). Washington, D. C.: Government Printing Office, 1873, p. 32.

2. GILLISS, J. M. *Report of the Secretary of the Navy, Communicating a Report of the Plan and Construction of the Depot of Charts and Instruments, With a Description of the Instruments, etc.* (28th Congress, 2d Session, Senate Document, v. 7, no. 114). Washington, D. C.: Government Printing Office, 1845, p. 55-64.

3. CLOPINE, M. S. *Astronomy* (Military Bibliographies No. 13, 13A, 13B). Military Librarians Division, Special Libraries Association, February 1958.

4. U. S. NAVY DEPARTMENT. *Report of the Secretary of the Navy, 1867.* Washington, D. C.: Government Printing Office, 1867, p. 133.

5. WEBER, G. A. *The Naval Observatory* (Institute for Government Research, Service Monographs of the United States Government, no. 39). Baltimore: Johns Hopkins Press, 1926, p. 32.

6. U. S. NAVY DEPARTMENT. *Annual Report of the Secretary of the Navy,* 1879. Washington, D. C.: Government Printing Office, 1880, p. 125-26.

7. HOLDEN, E. S. *A Subject-Index to the Publications of the United States Naval Observatory, 1845-1875* (U. S. Naval Observatory. Washington Astronomical Observations, 1876, Appendix I). Washington, D. C.: Government Printing Office, 1879, 74 p.

The SLA Personnel Survey: Its Value to Management

ROBERT J. HOWE, Director, Salary and Organization
Thompson Ramo Wooldridge Inc., Cleveland, Ohio

SINCE SURVEYS may be of many colors and because I assumed that SLA's would be good—but not outstanding—I felt I could probably make a contribution when I accepted the invitation to speak to SLA's Employment Chairmen. (What do librarians really know about surveys on compensation, I reasoned.) It is difficult to admit one is wrong—but I must. Salary administrators could learn much from a study of the SLA Survey. It is truly professional, and the Association should be proud of its Personnel Survey Committee—Janet Bogardus, Donald Wasson and Katharine Kinder.

Comments and Criticisms

I can, by dint of hard work, find only four points to make, and they are all, except one, on the credit side of the balance sheet:

1. The employment of Price Waterhouse & Co. for the conduct of the survey was excellent. It reflects an objective attitude on the part of the Association and lent considerable incentive to industry response. Returns of over 55 per cent attest to this.
2. Of particular importance, in my view and that of most companies, is the intelligent seeking of going market rates and a careful interpretation of results.
3. Since one should not attempt to compare apples and oranges, the SLA Committee wisely made possible a correlation of compensation with objective measures (indexes) of magnitude, or responsibility. Some of these are type of industry, size of library, type of degree and experience.

As a practical matter such measures must be statistical rather than narrative, objective rather than subjective, quantitative rather than qualitative, concrete rather than intangible. The measures or yardsticks must be easily expressed and permit comparisons of reasonably like positions.

Although many variances will occur between companies and incumbents because of subjective, qualitative and intangible characteristics, a sufficiency in the number of individual cases reported in a well-conducted survey (and I believe the SLA survey has this sufficiency) will provide a normal that can then be used as a bench-mark by individual organizations in determining proper compensation. Once this bench-mark is established, it is then possible for each company to apply any necessary subjective and qualitative measures in its own individual way, each within its own company and according to its policies. Arch Patton, a nationally recognized expert in compensation, puts it this way:

> "Executives [and companies] are suspicious of any approach to compensation that does not involve both quantitative and qualitative bases for judging individual performance.
>
> "They recognize that when mathematics is the principal determinant of reward or penalty, quirks of fate beyond their control can seriously and unfavorably affect the end result. Similarly, [they] resent being measured largely in terms of subjective criteria."

Some very respectable organizations embrace these same concepts in developing bench-marks for presidents of companies, for profit-responsible division general managers and for the principal department heads reporting to division managers. Thompson Ramo Wooldridge is one of these organizations. Research in compensation, which we initiated in 1953 and extended through the years, resulted in March 1960 in a published description of these techniques.

4. There is only one criticism I can make about the SLA Survey. The Personnel Survey Committee omitted one factor of possible

Paper given before Chapter Employment Chairmen on June 7, 1960 at the 51st SLA Convention in Cleveland, Ohio.

use and measurement—the *size* of organization. It is a natural omission because who would think that perhaps librarians' salaries have greater correlation to the size of the enterprise than the type of library work (i.e., technical, reference, etc.), or to the type of industry (i.e., nuclear, petroleum, metals, etc.) or to the qualifications of the librarian (i.e., degree held and/or experience).

In future surveys this factor might be given consideration, because in an independent technical librarian survey* conducted at the same time as the SLA Survey (but among a selected list of the nation's 500 largest industrial corporations) median and average salaries exceed the SLA figures by roughly 10 per cent. This is a relationship that might be expected because *1)* the companies are larger and *2)* the participants were more highly selected.

It is true, moreover, that, although I suggested previously that there is greater correlation to size than to type of library, industry or qualifications of the librarian, sheer size factors themselves are (by and large) correlated with type of library, industry and qualifications of personnel. The larger the company, the more complex is the job and the more qualified are the managerial personnel.

Measures of size might be one or more of the following: sales, number of clerical and professional or administrative personnel employed directly in the library or number of employees in the geographical area served.

Management Questions

Elizabeth Barrett, librarian at Thompson Ramo Wooldridge, and some of her contemporaries, have been kind enough to develop some questions they believe would be interesting to have answered.

How does management use the results of this kind of a survey? Actually, there are many ways. I shall report on ours and hope that it is fairly representative.

Surveys, such as this, are basic to the determination of the relative value of work both in the minds of the incumbents of the positions and the organizations that employ them. Compensation administration is not a hit and miss technique. It must have a solid and consistent basis of fact. Neither the employee nor the company should arbitrarily or unilaterally decide upon the value of the work. Compensation is a two-way street and should, if possible, produce satisfaction on the part of both employee and company.

This is not to say the employee does not want more money (nor, *contra,* that the employer does not hope to keep costs in balance) but only that these two natural forces be recognized. Recognition of these two forces can best be accomplished through intelligent and objective surveys and other collections of data which reveal the compensation terms that, in effect, hundreds or thousands of employees consider fair enough to have accepted and continued in their employment and hundreds of employers consider fair enough to have employed such workers.

The results of acceptable surveys, therefore, become the bench-mark point from which different organizations judge and relate their work at less than, equal to, or more than data revealed by the survey.

How does a company arrive at the value (salary) of a job?

Just as in the SLA Survey, other surveys are being made constantly for every kind of function performed by a company. In my company, and in many others, the pricing of each job is made in harmony with the results of the survey. Several considerations, however, must be made. One is the validity of the survey results in terms of the needs and character of the company using the results. If a survey takes in the "universe," as it were, the results mean one thing; if the survey is conducted, however, among a highly select list of companies—it means something entirely different. In the first case many organizations would deliberately establish rates higher than the survey results indicate. In the second case a matching of compensation with survey results, assuming the jobs were reasonably comparable, would be adequate.

Do companies pay what they have to pay to obtain and hold the employee, or are other

* *A. O. Smith Corporation Salary Survey, 1959-60.* Milwaukee: 1960, 2 p.

factors involved, such as the relationship between positions internally?

A chap in my own company says, "There is nothing wrong with paying a good man (or woman or librarian) a good salary. There is everything wrong with paying a poor man (or woman or librarian) a good salary."

Of course companies pay what they have to pay to obtain and hold an employee. There are, however, many other factors. Reputable companies do not, as a matter of policy, "make money" by holding salaries (or wages) low. When my questioners say "obtain and hold the employee," they must also mean the kind of employee suitable to the organization who make a contribution.

If the compensation of any single position, or all positions, is kept too low, turnover will have its effect, and costs will rise. Every successful company knows that improper economy can be a false and misleading policy. On the other hand, no organization can long survive if its general wage or salary levels are higher than its competitors', if there is an equality of employee effectiveness between organizations.

What is, or should be, the relationship between average salary of incumbents and the hiring salary for experienced personnel?

Our policy is that an experienced employee should be employed at a rate which is in proper balance with existing internal salaries for personnel doing the same work—less an amount that properly reflects the new employee's lack of knowledge about the company. The minimum rate of a range is for personnel having minimum qualifications. Experienced personnel should be employed above the minimum but not quite as high as equally experienced personnel in the company in the same position.

Why is there so little spread between the salaries of those with seven to ten years of experience and those with over 25 years' experience?

I might turn this around, to illustrate my point, and ask why is there so large a spread relatively between those with less than two years' experience and those with seven to ten years' experience? To refresh your memory, average salaries increased by a little over $1,000 annually during the first seven, eight and nine years but slightly less than $700 yearly during the next 18 to X (unknown) years. This latter progress is half the gain in twice the period of time.

The answer is, I think, that almost every job has a properly decreasing rate of salary progression, and every job must have an end point. Every job most of us have ever had can be learned in X number of years. After this point—while progress is made—the degree of progress must necessarily be more and more limited. Companies practice salary administration, to the best of their ability, on the basis of matching this normal course of events. If the early salary progression were maintained forever, it would place the 40-year veteran laborer at equal to or above the new president, and this would never do. A classical question has been, is the employee one with ten years' experience or one year's experience ten times. In our frame of reference, is the 25-year librarian 25 times better than the beginner or is he, as the data indicate, a person with 20 per cent more effectiveness (at 8 years) repeated half again (total gain 30 per cent) at 25 years plus?

Why do only 88 out of 280 make over $10,000 a year? Statistically this is a little over four per cent and is substantially that top five per cent superior positions found in any normal distribution curve.

The answer, of course, is supply and demand. The supply is such that with the demand as it is, salaries of over $10,000 to four per cent of the sample provide adequate compensation to attract and hold sufficient and qualified personnel. This is where the particular market the survey sampled tops out. I am sure, however, that with the advance in technical and other areas of learning, libraries will continue to have a growing influence on the population and as demand increases (as I foresee it will), salaries may be expected to increase in similar degree. In the next ten years top librarian salaries will be more in the neighborhood of $15,000—but, of course, eggs will cost more too!

Reading Habits of Executives

RUTH NIELANDER, Librarian, Kemper Insurance Group
Lumbermens Mutual Casualty Company, Chicago, Illinois

MANY PROFILES have been drawn of the busy executive today—profiles of what he earns, where he lives, how much education he has. As librarians, we are particularly interested in the studies of what and how much he reads.

For many special librarians, particularly those who live in large cities, a very definite image comes to mind when executive reading habits are considered. We picture a commuter station at 5:15 any evening, and we see the Organization Men rushing home to Suburbia, each laden with a brief case filled, we are told, with reading matter. The train pulls out of the station and car after car, seat after seat is filled with men reading. Reading what? Their daily papers, of course; those reports that must be digested before 9 a.m. tomorrow; the memos labeled "Confidential" that came in just at 5 p.m.—reading, reading, reading. Bacon has said, "Reading maketh the full man . . ."—and it occurs to a mere librarian that this may be the reason so many executives today are overweight!

This, then, has become the image of the weary executive who is required to do an appalling amount of reading, whether he wants to or not. How valid is this image today? I decided to take a personal look at the flood that all but drowns the boss.

Two excellent surveys on the subject of executives' reading habits were made in 1957 and were reported in detail in two business journals.* I, however, was specifically interested in the executives I serve every day, and to learn about their reading habits I sent a questionnaire to 119 men: 74 senior executives, 44 junior executives and 11 members of what is called our junior board. By statistical standards, this was a small sampling, but the returns were excellent—97 replied, or 82%.

In my questionnaire I listed seven business periodicals, three business newspapers and three newsletters. I also questioned them on the number of trade journals they read, the number of local daily newspapers and the number of business and nonbusiness books.

First, a word about the three categories of executives. No hard and fast lines are drawn, but the majority of the senior executives are over 45, and the majority of junior executives are between 35 and 45. The junior board is a small group of young men, potential executives, under 35 who are appointed by the president to serve a three-year term.

The accompanying charts show the results of my survey. Despite the obvious fact that no great conclusions can be drawn from this small sampling, it did show that the pattern of heavy reading disclosed by other more extensive surveys was followed in my own company. I learned that the executives in the home office of the Kemper Insurance Group were reading at approximately the same rate as executives countrywide and that their reading load was constant and heavy.

What was the significance of this to me as a librarian? What, if anything, could I do to lighten this burden on the executives of my company? And when I refer to reading as a "burden," I hasten to point out that I mean only the waste of time caused by repetitious reading, for there is much duplication of content in trade magazines today. I'm thinking particularly of the insurance press, which grinds out dozens of magazines each week. I scan them all and find a great deal of the same material in magazine after magazine.

I'm not suggesting, of course, that half our subscriptions be canceled, but I am certain that top men should not be wasting their

Revision of a talk given at the March 1960 meeting of SLA's Illinois Chapter.

* *The Management Review*, January 1957, 60-70; *Harvard Business Review*, Sept.-Oct. 1957, 93-112.

time reading *all* these periodicals. It may add to my annual report figures to say that the library subscribes to two or three hundred periodicals, which are routed to some 1,500 men, but I am doing a disservice if I indiscriminately flood the executives with reading material. This is the burden no librarian should be guilty of fostering. To lighten this load may require a shakedown of the entire reading flow. It may require courage and decisiveness on the librarian's part, but it may pay off richly in executives' gratitude.

Perhaps one of the most effective ways librarians can constructively attack the reading problem is through a greater personal knowledge of the top men's interests. There is no single recipe for gaining this knowledge. Frequently it simply involves acquiring a "nose for news." All too few librarians are permitted behind the scenes of executives' meetings, but they can be alerted to special interests through reading minutes and inter-office memos. A surprising amount of information can be obtained simply by friendly contacts with various departments throughout the company. Thus, when one learns that a certain vice-president is assigned a problem in long-range planning, he can route specific articles on this subject to him or send him a memo calling his attention to a book on the subject that he may wish to read.

Other more formal methods of helping cut down the reading load include circulating tables of contents of magazines rather than the entire issue, publishing weekly or monthly abstracts of articles and circulating acquisition lists. All of these methods are helpful—not all will work for everyone, but each has its own merit.

And so I come back to my image of the harried business executive, and I now suggest that the librarian put himself in the picture and ask, "Am I a part of the problem or a part of the solution?"

Percentage of Executives Reading Business Periodicals

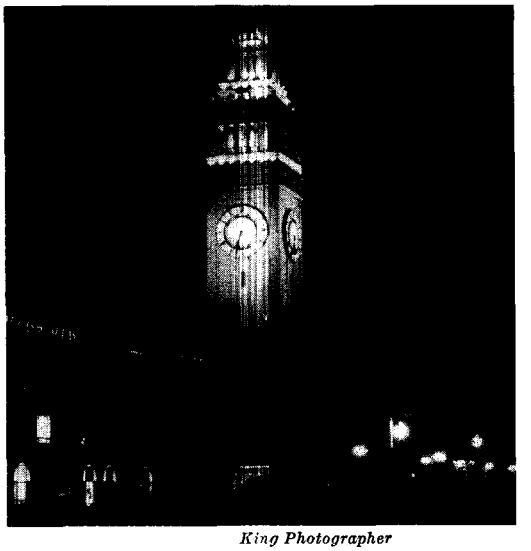
	Senior Executive	Junior Executive	Junior Board
Business Week	75%	43%	45%
Fortune	56	37	73
Harvard Business Review	32	20	45
Dun's Review	30	20	45
Newsweek	60	53	55
Time	61	53	55
U. S. News	70	60	55
Barron's	28	3	18
New York Journal of Commerce	58	33	18
Wall Street Journal	72	63	55
Kiplinger Washington Letter	49	30	18
Whaley-Eaton American Letter	46	10	18
Personal From Pearson	16	7	18

Number of Publications Read by Executives (excluding business periodicals)

	Senior Executive		Junior Executive		Junior Board	
	Range	*Average*	*Range*	*Average*	*Range*	*Average*
Trade Publications	1-10	4.5	1-10	2.7	2-15	5.9
Nonbusiness Periodicals	1-10	3.4	1-6	3.0	2-6	3.7
Local Newspapers	1-5	2.1	1-4	2.1	1-4	2.1
Business Books	0-12	2.7	1-10	1.9	1-14	4.4
Nonbusiness Books	0-98	15.12	0-100	12.0	2-55	24.4

SAN FRANCISCO: The 1961 SLA Convention City

THEODOR B. YERKE, Librarian
Pacific Southwest Forest and
Range Experiment Station
U. S. Forest Service
Berkeley, California



King Photographer

The Ferry Building, symbolic landmark of the city and of San Francisco Bay.

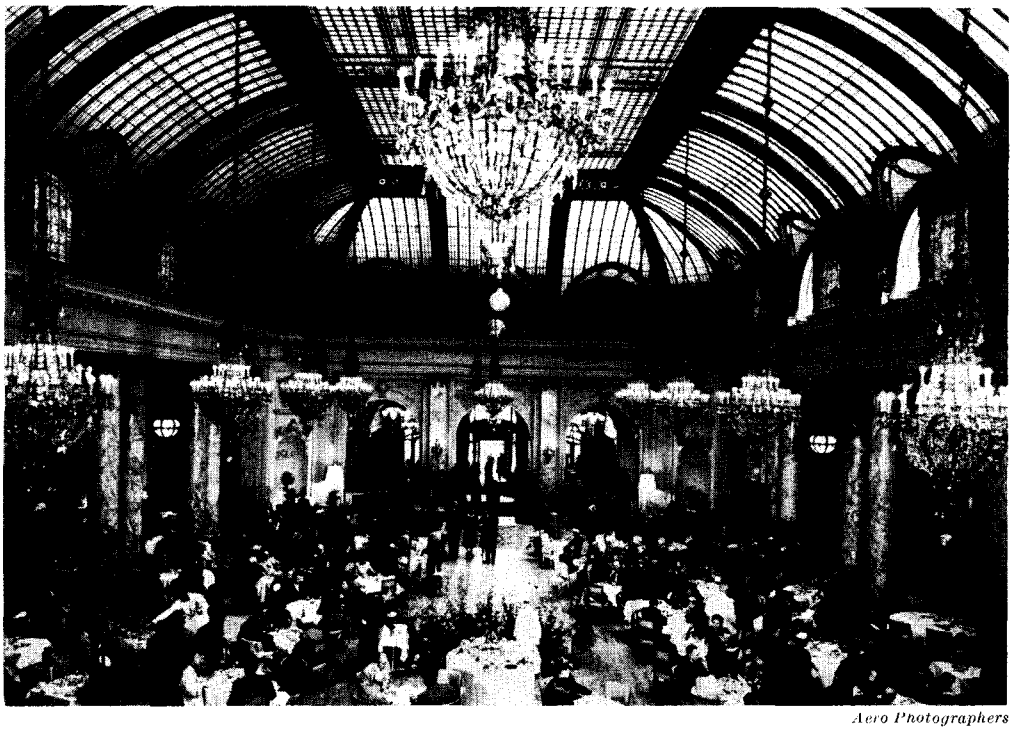
IT IS NOT NECESSARY to research facts and figures to provide identity for San Francisco. In the cant of public relations, its image is made. Everyone knows San Francisco as one of the fabled cities of the world, terrifying to pilgrims from the flatter states and provinces. The cosmopolitan status of SLA's 1961 Convention city is shared by not more than two peers in the United States. When site and climate are discussed, one must look wholly abroad for comparisons—Istanbul, Hong Kong, Rio de Janeiro, Capetown.

Many special librarians need no professional introduction. Communications people know San Francisco's role as the second international communications center of the United States; financial librarians know the city's importance as the country's third most vital financial center; transportation and commerce librarians see daily evidence of San Francisco's position as key to the expanding western regional market. In short, San Francisco is a major center of almost everything but provincialism and bigotry; from time to time it tries to make a showing in these fields but is not very successful.

San Francisco is perhaps the smallest in area of the world's great cities. Like Manhattan Island, neighborhoods of strikingly different ethnic or commercial structure press close upon each other. The central downtown business district is metropolitan, international, crowded and spectacular, with elevations from sea level to 376 feet (Nob Hill). Twin Peaks, which stand at the city's geographic center and provide the ultimate backdrop to downtown, rise to over 900 feet. Within an area of less than one square mile the piers and warehouses of the maritime district collide full on with the towering Montgomery Street financial district and with historic Jackson Square, which has become a center of interior decorators' showrooms in carefully restored older buildings. These sections merge directly into Chinatown, into the Italian North Beach bohemia and into the fashionable department store and shopping concentration around Union Square to the southwest.

Out of this densely populated, multicultural and multi-occupational *strudel* rise the downtown hills—Nob Hill, with its two great hotels, Grace Cathedral, the Pacific Union Club and other historical and new structures; Russian Hill, plumed with skyscraper apartments and hidden hanging gardens and offering sudden Mediterranean views of the Golden Gate and the entire north bay; lastly, Telegraph Hill, jammed with wooden cottages, flats and deluxe apartments and capped with Coit Tower looking down into the masts of moored ships along the Embarcadero.

SLA Convention Headquarters will be at the Palace (since 1954 the Sheraton-Palace) Hotel. There have been two Palace Hotels. The first, opening in 1875, was the great



Aero Photographers

The Garden Court of the Sheraton-Palace Hotel, Convention Headquarters.

luxury showpiece of the Far West. It hosted the notables of its epoch: Generals Grant, Sheridan and Sherman; Presidents Harrison, McKinley, Theodore Roosevelt and Taft; writers and performers Oscar Wilde, Mark Twain, Sarah Bernhardt, Adeline Patti, Ignace Paderewski, etc. (the arts are long, the article short); and the nobility of Europe and South America. Enrico Caruso was presumedly sleeping soundly in the Palace the night in April 1906 when San Francisco came tumbling down. The 20th century Palace, which opened in 1909, has seen a similar procession of the world's famed and talented. And one may still breakfast in the same Garden Court where Woodrow Wilson gave his famed League of Nations speech and Marshal Foche, a bit later, deplored Prohibition.

The Sheraton-Palace, at New Montgomery and Market Streets, is at the center of the central business area. It is on flat ground, and the streets are level in this vicinity for about as far as one cares to walk comfortably. This level area in a generally undulating city contains nearly all the major and interesting office and public buildings, the famous department stores and scores of first-class restaurants and nighttime attractions. Persons with mechanical limitations can do quite well without having to cope with gradients. However, the California Street Cable Car is only four short blocks from Convention Headquarters. This line hauls its passengers up to the top of Nob Hill, where it crosses the Powell-Mason and Powell-Hyde cables. Here one can transfer for slow motion roller-coaster rides through gripping and historic scenery out to Fisherman's Wharf or Aquatic Park, with its views of the Golden Gate. As all these features have been the subject of a considerable literature, there is no point in further divagations here.

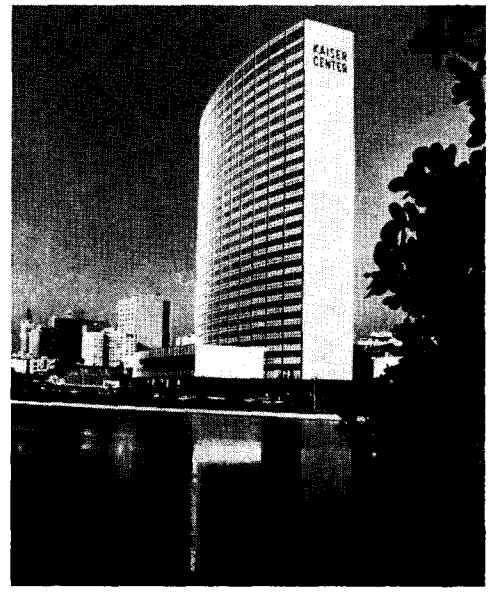
The opening reception Sunday evening, May 28, will be held at the World Trade Club in the World Trade Center, located in the famous Ferry building. It may be said with utmost modesty that the view from the clubroom is staggering. The Bay Bridge frames the hills of Berkeley and Oakland

eight miles away, where thousands of hillside windows flash back the setting sun. Ocean-going vessels pass by just a few hundred feet out in the channel. The libraries of the Center will be open to SLA members. Current trade journals and newspapers from 85 countries are displayed for easy browsing, and 1,250 foreign and domestic directories are kept up to date for the one hundred tenants of the Center, who represent 20 foreign nations. This is the first international shipping library west of the Mississippi.

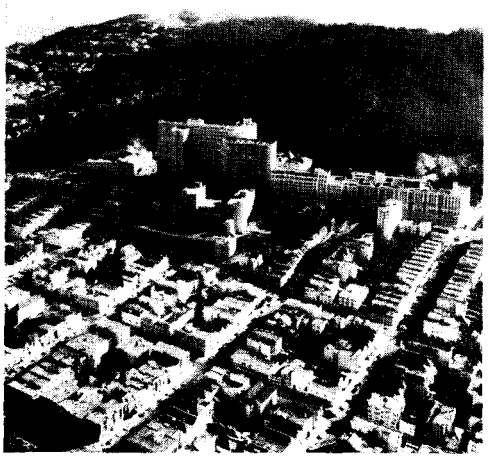
During Convention week the majority of downtown special libraries will be glad to receive visitors; formal open houses are planned for some, and division and section meetings will take place in others. Libraries in the immediate downtown area (walking distance from the Sheraton-Palace) include: The Asia Foundation Library, a focal point of orientation for visiting librarians from Asia; the Bechtel [steel] Corporation library on Montgomery St.; the banking libraries of the Federal Reserve Bank of San Francisco, the Bank of America, Crocker-Anglo National Bank and the Wells-Fargo-American Trust Co. (the Wells Fargo History Room Library is a small museum of Western Americana); the State Division of Mines library in the Ferry building; the U.S. Bureau of Mines Petroleum Research Laboratory library in the huge Federal building; the Pacific Gas and Electric Co. library in the PG&E tower; the Standard Oil Co. of California library; and the Bay Area Air Pollution District library, which is an all Microcard-Uniterm operation. San Francisco has one of the few remaining pre-public library movement workingmen's institute libraries, the Mechanics' Institute, which deserves special mention. Founded in 1855 to help elevate the workingman from the temptations of the city's booming Barbary Coast, the Mechanics Institute continues to provide superior service in an age of public-financed library expansion. Distinctly Californian and unique is the Wine Institute Library, which serves vintners and the wine trade.

Beyond the extremely compact central districts are the many separate and markedly different neighborhoods of San Francisco. In attending meetings, or just visiting, SLA members will be unable to avoid well-worn tourist paths. The library of the California Academy of Sciences is in Golden Gate Park, across the Music Concourse from the De-Young Museum. For decades the Academy has been a bulwark of the West Coast scientific community. It operates the Steinhart Aquarium, a Museum of Natural History, publishes *Pacific Discovery* and runs the Morrison Planetarium. The Morrison's star projector was built in San Francisco—the first star projector ever made elsewhere than at the Zeiss works in Germany. In cooperation with the Wine Institute, the Metals Division will hold a wine tasting at the Academy Tuesday evening, May 30 (proceeds go to the SLA Scholarship Fund).

Military librarians will be unable to avoid the startling vistas and silvicultural beauty of the Presidio if they hope to see the U.S. Sixth Army Library and Library Depot and its branches at Fort Baker and Fort Winfield Scott. Biological Sciences and Hospital Divisions will ascend Parnassus Ridge on the lower slopes of 918-foot Mt. Sutro, for Parnassus Ridge is dominated by the huge complex of the University of California



The huge Kaiser Center in downtown Oakland where the Metals Division is scheduling meetings.



The University of California's Medical Center.

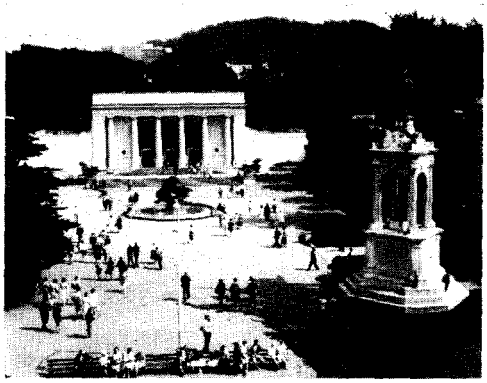
Medical Center, topped by its 16-story main unit. From any of the windows of these floors, facing north, is the perpetually distracting vista of all northern San Francisco, the Golden Gate and Mt. Tamalpais (elevation 2,604 feet) looming up Italianate in neighboring Marin county.

Two special libraries in the city are in former mansions, which preserve the busy splendor of the Far West's Victorian style. The Pacific Union Club library is in the former home of James Flood, the silver king. In opulent Pacific Heights district is the California Historical Society, in the old Whittier home—William Whittier was the co-founder of the W. P. Fuller Paint and Glass Co. The golden oak panelling and general appointments are themselves museum-pieces.

Sutro Library, actually a branch of the State Library, has recently been removed to the University of San Francisco. The Sutro Library, with its manuscripts, historical pamphlets and volumes, is essentially that part of Adolph Sutro's collection that survived the 1906 fire. Out in the southwest corner of the city, among elegant new housing developments and bordered to its west by Lake Merced and the dunes of Fort Funston, is San Francisco State College—a very recently built campus whose splendid library building is (for the present at least) providing ample room for an expanding collection.

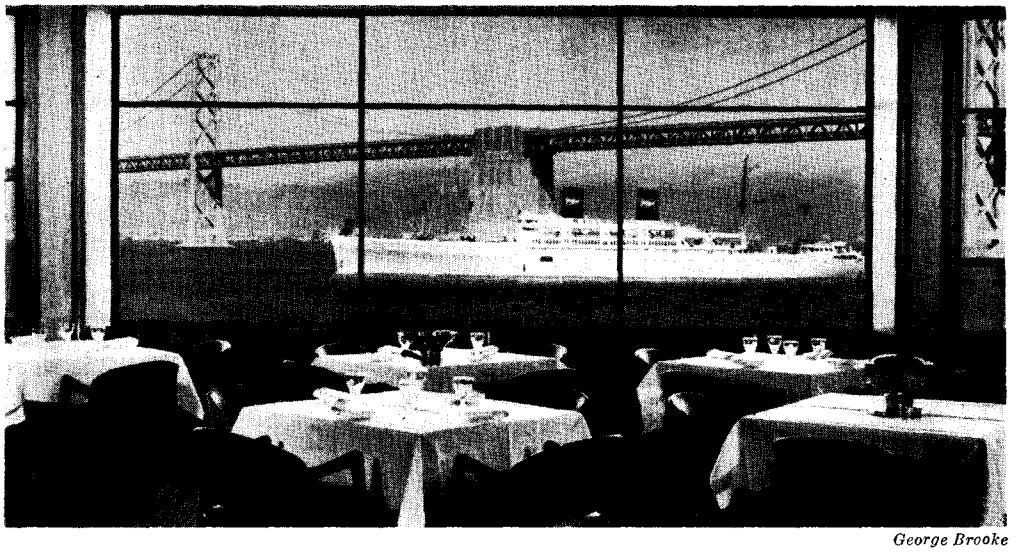
But San Francisco is only the central showpiece of a bay region abounding in industrial, educational, scientific and medical libraries and institutions. Some 40 freeway miles south down the peninsula is the large complex built up around Stanford University in Palo Alto. Aside from the Stanford libraries *per se* are the Hoover Institution on War, Revolution and Peace, the Food Research Institute library, the Stanford Research Institute library and the Ford Foundation's Center for Advanced Study in the Behavioral Sciences library. In nearby San José is the IBM Research and Advanced Development Library; atop Mt. Hamilton is the University of California's Lick Observatory and library; in Palo Alto, again, is the library of Lockheed Aircraft Missiles and Space Division; and at Mountain View, the Electronic Defense Laboratory library of Sylvania Electric Products, Inc.

In San Francisco, from any eastward-looking downtown elevation, the Campanile tower of the University of California over in Berkeley may be seen by day or night. The eminence of the Berkeley campus libraries of the world's largest university should need no elaboration to SLA members. But the East Bay, comprising Berkeley, Oakland and a host of smaller cities, is less well-known than the area's population, industrial contribution, educational resources and maritime significance entitles it to be. Its population is twice or more than that of San Francisco, and but for the Queen City of the West across the water, the East Bay would be seen as a major metropolitan complex in its own right.



California Academy of Sciences, Moss Photography

The California Academy of Sciences, site of the Convention's wine tasting.



George Brooke

View from the World Trade Center Club, scene of the Convention's opening reception.

Tours are planned during the Convention to both the Stanford and the East Bay libraries, and division meetings are scheduled in the Institute of Transportation and Traffic Management at Richmond (just north of Berkeley) and in the newly opened Kaiser Center in downtown Oakland.

Some last words of advice and caution: San Francisco in late May and early June is cool and pleasant with sometimes nippy evenings. Women favor lightweight wool suits and dresses and, because of ocean breezes, small hats. A woman may feel too informal unless wearing hat and gloves. It may be wise to include a dark silk basic dress, a two-piece costume, or a well-tailored dark cotton for an unusually warm day, or for tours down to Stanford. For both men and women a lightweight wrap is needed. Men should have light to medium weight wool suits. One does not wear baroque tropical shirts with Freudian symbols in garish colors, as is common in some southern parts of California. Neither does one wear perforated shoes, straw hats and other necessities of more florid regions. As to expense, it is quite true that San Francisco is expensive, generally. But it is also possible to eat sumptuously, travel about cheaply and lodge modestly. The Local Information Committee will have information of this sort, and local SLA members are compiling a file of "secret" and inexpensive restaurants.

One last thing—in an effort to seem "adaptable" and friendly, *don't call it 'Frisco!* This is like pretending to have been on intimate terms with David Lloyd George by referring to him as "Lloyd."

BIBLIOGRAPHY

The literature on San Francisco, historical and contemporary, is voluminous. The following are recent and pleasant additions:

GILLIAM, Hal, and PALMER, Phil. *The Face of San Francisco.* Garden City, N. Y.: Doubleday, 1960. 256 p.

Splendid photos and informative text. Recommended.

———. *San Francisco Bay.* Garden City, N. Y.: Doubleday, 1957.

Hills of San Francisco. With a foreword by Herb Caen. San Francisco: Chronicle Publishing Co., 1959. 89 p.

About the city's 42 hills, with historical observations and many photos, historical and contemporary.

Buildings of the Bay Area: A Guide to the Architecture of the San Francisco Bay Region. New York: Grove Press, 1960.

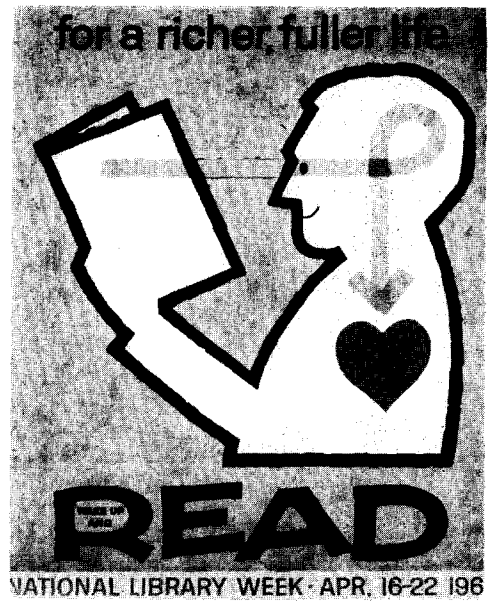
A detailed guide to the notable structures, both modern and historical, that abound in the entire area. Arranged neighborhood by neighborhood and city by city.

DILLON, Richard. "Loaves and Fishes." *Library Journal,* June 15, 1958, p. 1841-6.

A librarian's account of the city's restaurant offerings, written for the ALA convention of 1958 in San Francisco.

NATIONAL LIBRARY WEEK:

Special Libraries Case Histories



A Snow Job: The Story of a Radio Broadcast

A SNOWSTORM IS A necessary ingredient for a successful radio broadcast! Statisticians may question the validity of conclusions drawn from only one experience, but a snowstorm did provide an unexpectedly large audience for the New Jersey Chapter's broadcast for National Library Week in 1958.

A vigorous recruitment and public relations program had been undertaken by the New Jersey Chapter during the year, 1957-1958. When National Library Week was announced for March 16-22, 1958, we prepared a radio script to tell the story of special libraries in conjunction with NLW, and also emphasized our consultation and recruitment programs.

Our script was in the form of suggested questions and answers for a "15-minute" interview program (the elapsed time was 12 minutes). Included in the script were descriptions of the variety of special library activities in the state, their contributions to the growth of the state and the nation and reference to John Cotton Dana's contributions to special libraries while he was at the Newark Public Library. A variable portion of the script was designed to highlight specific libraries or librarians in the area covered by each radio station.

The NLW slogan, "Wake Up and Read," was also included to show the need for highly specialized reference materials in our parent organizations.

A copy of our suggested script was sent to the program directors of the selected stations about six weeks before NLW. Publicity brochures from both SLA and NLW were also enclosed. Because recruitment was one of our aims, we suggested a late afternoon spot. Then we waited for replies *(Plural)*.

We received a reply *(Singular)* from Station WMTR (Morristown, New Jersey). Our suggested program had been accepted and was scheduled for 9:30 a.m. on the Friday before NLW. We were so overjoyed that we agreed enthusiastically even though we considered such a morning hour to be the least hopeful time for our purposes.

March 14, 1958, dawned bright and snowy—unpredicted snow, that is. Northern New Jersey was covered with a wondrous, thick, white snow, and the New Jersey highways were covered with autos, trucks, busses—most of them immobile.

The trip to Morristown resembled Little Eva's escape over the ice, except that the bloodhounds snuggled cozily in their kennels. A 20-minute trip required an hour-and-a-half! At 9:31 a snow-covered car triple-parked in front of the radio station. At 9:32 the snow-covered SLA'er stumbled into the studio to be welcomed gleefully by the receptionist along with frantic gestures to the control room to cut the music that was being substituted. At 9:32:3 the broadcast started with overcoat still in place!

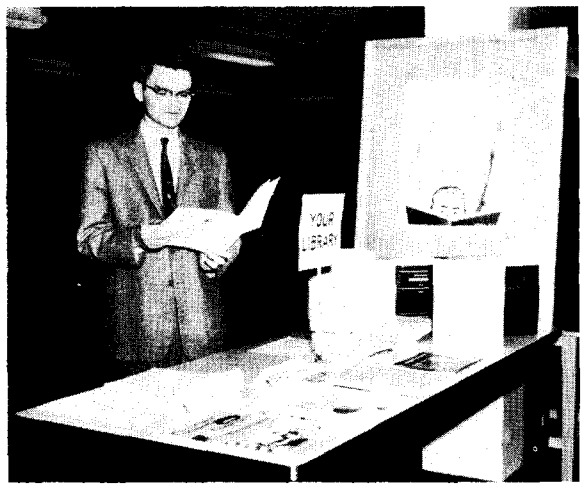
And somehow a more-or-less coherent interview proceeded by use of frantic gestures to omit certain parts of the script or to emphasize others.

That afternoon, back at the farm, phone messages began to arrive from "fans." Uniformly the messages started: "I heard your broadcast while I was stuck in the snow this morning. . . ." Some of the questions were for specific informational needs of persons in companies too small to support a special library. In these cases we were able to introduce the caller to the services of his community's public library. In other instances the inquirers were referred to the Chapter's Consultation Committee.

The snowstorm had unexpectedly enlarged our radio audience. We are unable to point definitely to the establishment of a special library or to the recruitment of a student as a result of the broadcast, but the New Jersey Chapter did have a NLW broadcast that was widely heard, and we believe that acorns can sprout even during a snowstorm.

FRANK E. MCKENNA, Supervisor, Information Center
Central Research Laboratories, Air Reduction Company, Inc., Murray Hill, N. J.

Cafeteria Exhibit and Kiwanis Talk



Mr. King and his cafeteria display.

FROM THE TIME I BECAME librarian in June 1959 until National Library Week in April 1960, publicity of the engineering library located at the main plant of the Westinghouse Electronic Tube Division, Elmira, New York, had not been so extensive as I had intended it to be. I chose National Library Week as a means of rectifying the situation.

Because of its use by most of the 1,200 employees at the plant, the cafeteria was selected for the location of a small exhibit of recent books and periodicals, and "take one" copies of the *Library Bulletin,* a monthly publication, and a list of periodicals received in the library. The exhibit was well received by all, and the library saw both curiosity seekers and new customers during the ensuing days.

Journeying on Wednesday of National Library Week to Bath, where the receiving tube plant of the Electronic Tube Division is located, I gave a talk before the local Kiwanis Club. The subject was "Industrial Libraries," and covered for the most part types of industrial libraries and their problems, making comparisons with more familiar libraries, such as public and school. The live-wire Kiwanians seemed attentive, and the only regret that I had was that time did not permit a question and answer period. However, I was able to display a few new books from the library and was able to distribute copies of the most recent *Library Bulletin.*

The program chairman, who is the librarian of the Bath Veterans Administration Cen-

ter, had also invited librarians from a public library, elementary school and high school in the area to be present, so the Kiwanians were made aware of the fact that there are librarians serving different clientele.

Plant officials willingly cooperated in making a success of both the exhibit and the talk. Learning of the excellent reception of these, they realized the stimulus not only affected the library but the entire corporation. Plans for an exhibit during National Library Week 1961 are now underway.

SHELDON S. KING, Engineering Librarian
Electronic Tube Division, Westinghouse Electric Corporation, Elmira, New York

Company Publications Featured in NLW Exhibit

TO CASH IN ON THE NATIONAL and local publicity for special libraries during National Library Week is the obvious, but not always easy, aim of any SLA Chapter. Since special libraries often cannot encourage public patronage, much National Library Week publicity appears to have little relevance for Special Libraries Association Chapters. However, there is the possibility of introducing another facet of the library service within a community into general exhibits and meetings and at the same time furthering public awareness of special libraries.

For instance in Houston, Texas, when in April 1960, the local committee for National Library Week planned a general library week program in the University of Houston Library Auditorium, Sara Aull, President of the Texas Chapter and reference librarian at the University of Houston, seized the opportunity to arrange a special libraries exhibit in the main lobby of the library adjacent to the auditorium. Securing the use of two standard wall cases, she collected pictures and company publications from Texas Chapter members in Houston and borrowed a blue and gold SLA banner from Association Headquarters. Louise Christy, a student assistant majoring in art, designed the exhibits. In one case she displayed SLA publications backed by the large colorful banner. The other featured pictures and stories about special libraries in Houston, as printed in their company publications. Off-white cards giving the names of the libraries were connected with pertinent items by blue ribbons. Thumb tacks held these in place on the natural-color cork background. Mitten display letters were used for the heading, "Special Libraries Assn. Texas Chapter." The glass front cases, 4½ feet high, 6 feet wide and 22½ inches deep, had interior lighting on the ceiling and on each side.

Besides catching the eyes of persons who attended the meeting, the exhibit was viewed by students and faculty. It remained in the lobby of the University library for several weeks. Pictures were taken by the Audio-Visual Center of the University and by Mrs. Dorothy Shatto, editor of *The Recorder,* the company publication issued by Schlumberger Well Surveying Corporation.

MARIAN ORGAIN, Librarian
The Houston *Chronicle,* Houston, Texas

Wall case displays in the University of Houston Library arranged by the Texas Chapter.

CURRENT CONCENTRATES Of The Library World

FOR SOME YEARS the increasing lag in subject indexing important abstract journals has been a very serious matter to people who are searching the literature either for a specific piece of information or for compiling bibliographies. Now there are some bright lights ahead.

Chemical Abstracts Service is about to publish *Chemical Titles,* twice a month. The contents of some 550 journals of pure and applied Chemistry will be scanned for the issues made in 1960. These include the foremost journals in their field, from all over the world.

The method of production is explained by Dr. G. Malcom Dyson in "Closing the Gap in Chemical Documentation" (*Chemical & Engineering News,* May 9, 1960): "The magazine is produced like this: names and titles are punched directly onto cards. Information on these cards is transferred to tape and the tape is run through an IBM 704 computer with 8,000 word memory. The machine reads each title, comparing each word with the memory. In a title such as 'Corrosion of Magnesium by Sea Water,' the entry is examined six times, once for each word present. The memory has been programmed to reject words like 'of' and 'by' and chosen entries are arranged with each keyword in the center . . .

"All entries between the two arrows are alphabetized and then typed by the machine. The print-out constitutes the material which is photolithographed and distributed."

Not only will *Chemical Titles* reach libraries considerably in advance of the abstracts, but the arrangement is ideal for rapid search in the library. The keyword index is arranged in two columns to the page. The alphabetically listed keywords are always in the center of the column. This gives the effect of a solid stripe down which to run the eye. There is also a biochemical keyword index, a bibliography and list of periodicals.

American Society for Metals is currently operating ASM/MDS—American Society for Metals/Metals Documentation Service. This is a fast, thorough and up-to-the-minute searching service, using the advanced GE-250 Information Searching Selector built by General Electric Company. The basic working units are the 12,000 Metal literature abstracts published yearly in *ASM Review of Metal Literature.* After being indexed and encoded on magnetic tape, these abstracts become part of the most comprehensive library in the world of metals. The other two "foundation stones" of the service are a highly refined and very effective method of subject analysis developed by James W. Perry and Allen Kent of the Center for Documentation and Communication Research at Western Reserve University; and finally the new GE-250, built by General Electric Company, according to designs also developed at the Western Reserve University Documentation Center.

ASM stipulated that the system devised for indexing and searching metallurgical literature be capable of extension into wider fields. Recognizing that metallurgists have problems in related fields it is intended to expand the coverage into such areas as solid-state

↓
Corrosion of Magnesium by Sea Water
Magnesium by Sea Water
Sea Water
↑

Corrosion of
Corrosion of Magnesium by

physics. The following services are now available from ASM/MDS:

Current awareness searches provide prompt, current information on a problem, in the form of abstracts to be sent to the subscriber every two weeks. The price is $300 per year, somewhat higher for unusual requirements.

Generic searches provide the same service on questions of wide interest, priced at $200 a year.

Retrospective searches, bibliographies of previous literature on any subject prepared on demand. The price of this varies.

Encoded tapes of the year's literature are available to those who want their own machine, by special arrangement. This enables the processing of individual or confidential information.

In Japan, The National Diet Library of Japan, with the help of a grant from the National Science Foundation, is planning to publish an English edition of its monthly index to *Periodical Articles, Natural Sciences Section* (Zasshi Kiji Sakiun, Shiyen Kagakuhen). It is anticipated that the English version of the index will become a basic reference aid, providing United States scientists with improved access to Japanese natural sciences literature.

In scanning *Library Research in Progress,* I see many more items such as:

Machine Searching of Diabetes Literature
Principal Investigators: Allen Kent and Jessica Melton, Western Reserve University
Cooperating Group: American Diabetes Association ($10,000 grant)

Machine Searching Electrical Engineering Literature
Principal Investigators: Jessica Melton and Allen Kent, Western Reserve University
Cooperating Groups: University of Arizona and U. S. Army Signal Corps, Fort Huachuca ($7,500-$15,000 grant)

Word Correlation and Automatic Indexing
Purpose: To investigate techniques for automating indexing of technical articles by machine processing of the full natural language text of documents
Principal Investigator: Don R. Swanson, Technical Staff, Ramo-Wooldridge Intellectronics Laboratories
Cooperating Group: Council on Library Resources, Inc. (Contract)

Targets for Research in Library Work
Purpose: To assemble, in a series of reports from published and unpublished sources, the data defining in management terms the principal problems of library work
Book to be published in 1960 by Rutgers University Press
Principal Investigator: Ralph R. Shaw, Dean of Graduate School of Library Service
Cooperating Group: Council on Library Resources, Inc. ($100,000 grant)

Book-Marking Equipment
Purpose: To develop compact, economical, efficient equipment for marking call numbers on books, thus eliminating hand-lettering
Principal Investigator: Battelle Memorial Institute (Reported by Frazer G. Pool, Director, Library Technology Project)
Cooperating Group: American Library Association

From these and myriad items like them, there emerges a picture of current library research that extends from the development of machines to search the literature, to scholarly appraisal of methods, to the invention of devices to perform small, time-consuming duties. We find science and the library interlocked. Librarians serve science, and do scientific research into ways and means to perform greater tasks better. One of my own laboratory heads, when he is vexed because I seem to be cutting off some special service, goes to his superiors, and mine, and declaims, "Nine-tenths of research is in the library. If you cut down on library service, you cripple the laboratories." And so we find, as an integral part of the enormous growth of research and development, with the resulting records and literature, that science also serves libraries.

(Extracted from a talk before the New Jersey Chapter, November 9, 1960, by Mrs. Marjorie O. Baker, Librarian, Engelhard Industries, Inc., Newark, New Jersey.)

This Works For Us . . .

Three-Part Chargeout System

In 1956 the Research and Engineering Department of Preformed Line Products Company completed plans for its library. The library was intended primarily to disseminate information to the engineering staff and secondarily to serve other departments of the company. Because of the diversity of items needed in research and development and the length of time an engineer or technician might need to keep items for reference study during the progress of projects, it was felt advisable for the library to maintain control of where the material could be quickly and easily located, whether "in" or "out."

This concept meant that the librarian and library staff members would be required to know the whereabouts of each item in the event that it should be required by someone other than the original borrower. With the exception of current periodicals, no time restriction is placed on borrowing any items from the research library. Nevertheless, a three-way control is kept of all borrowed items—location, borrower and retention time.

To aid in establishing the location of the borrowed items, a three-part, tri-colored 3 x 5 inch, carbonless chargeout form is used (Figure 1). It is similar in design to a snap-out form, except that National Cash Register chemical backing is used instead of carbon tissue. The top original is white, the second copy is light green, and the bottom is pink. The top edges of the three are lightly tip-dipped in glue which fuses the copies into sets.

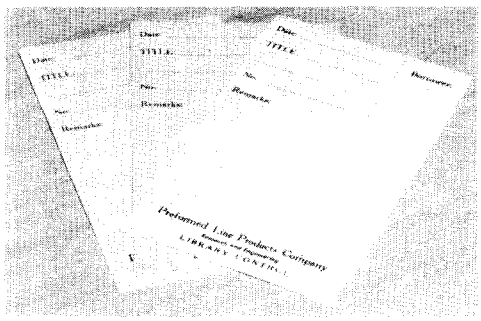


Figure 1: Three-part chargeout form.

These chargeout sets are provided in conveniently small dispensers on the library table, shelves, library staff's desks and librarian's desk (Figure 2). They can be filled in either by the borrower or a staff member.

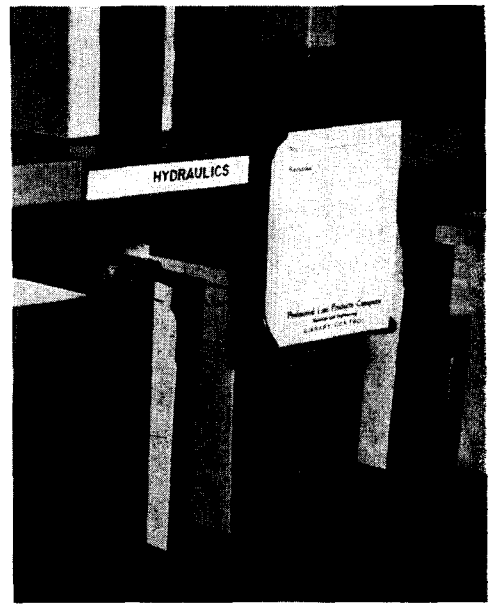


Figure 2: Chargeout-form dispenser and indicator cards on book shelves.

The form is filled in at the time an item is borrowed. The top white original is removed immediately and inserted into a pocket glued inside the book. Often this is done by the borrower himself, who initials or writes his name in the borrower's column. The two bottom copies are left intact on the librarian's or assistant's desk to be processed. Since the second green copy is used for record keeping, it is kept at the assistant's desk until all the day's copies are processed—usually the next morning. The bottom pink copy of the chargeout set, however, is immediately inserted by a library staff member into a pocket placed on the upper right corner of a black indicator card.

This 8½ x 9½ inch black indicator card is thin, stiff and smooth-faced and replaces the book on the shelf or the material taken from the vertical file. The indicator card's

unique design (size and position of pocket) make it adaptable for replacing any items borrowed from the library, e.g., books, periodicals, folded maps or vertical file material.

When a browser or library staff member sees the black card, he can readily see the name or initials of the person who borrowed the item on the pink slip in the card pocket. The librarian or the would-be user can then go directly to the first borrower should something merely need to be checked or verified. If the item is to be borrowed, however, the librarian or prospective reader can discuss borrowing it from the first person, who is usually cooperative in relinquishing it—at least temporarily—in the interest of the other's requirements. Should the first borrower lend the item to the second person, it remains charged to the first name because the indicator card still holds the pink copy of the original chargeout. Therefore, the responsibility for the borrowed item remains with the first person, as far as the library is concerned. But if the second person needs the material for a substantial length of time and the first borrower can release it, it is returned to the library so that the original chargeout can be cleared and a new one made. In a few instances, of course, some titles are in such demand that the library purchases extra copies. Even so, a black indicator card is at the vacated spot for each copy.

The green copy of the chargeout form serves a double purpose. It is first used to post the borrower's record in a visible file. This record shows the librarian not only the items borrowed and due to be returned but also the individual's project interests for reference or bibliographic purposes.

Although no time limit has been established for retention of borrowed items, it is felt necessary to have quarterly follow-ups in order to maintain close control. The green copies are therefore filed chronologically, after posting the borrower's record.

This quarterly review is used mainly to determine whether charged-out material is still needed by the borrower. In the event he does need to retain it, the original or previous chargeout set is cancelled and another filled in, thereby renewing and updating the borrower's record file. Many times the borrower has forgotten about or misplaced the item, and he is glad to review the material charged to him and release what he may have overlooked.

After the borrowed item is returned, the white copy is removed from the pocket of the material when it is replaced on the shelf or in the vertical file. The pink copy from the indicator card and the white copy are then stapled together. The person handling the returns notes the date of return on the top of the two stapled copies and staples them to the green chronological copy at the time of posting the return to the borrower's record.

Yellow student pocket folders are used for charging out vertical file material, such

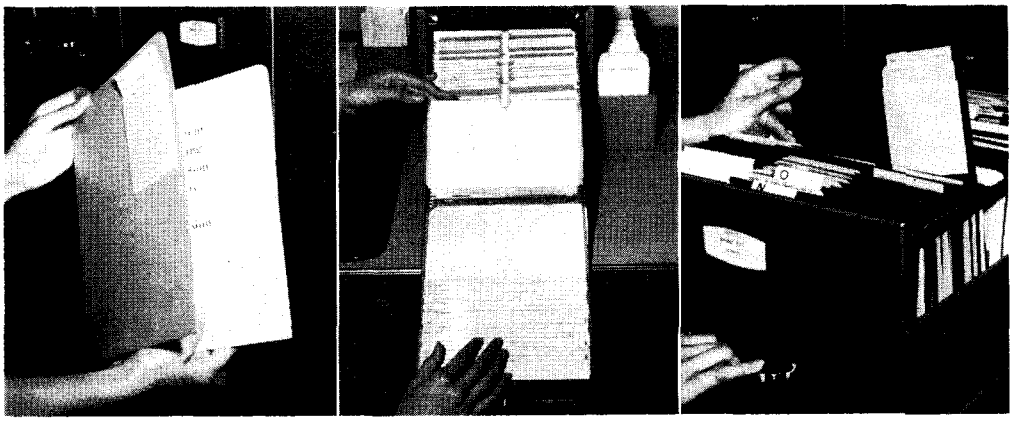


Figure 3: Indicator cards in vertical file drawer, borrower's record in visible file and vertical file material in pocket folder.

as loose technical papers and pamphlets not suitable for pocket attachment. In this case, the little manila pockets are glued to the outside front of the folders, near the upper right-hand corner. The yellow color was selected specifically for R&E library material for ease in locating items on a borrower's desk or among his papers. The use of these folders has diminished the crinkling, tearing or soiling of loose documents, some of which are rare or irreplaceable.

This chargeout system, utilizing the indicator card as a shelf replacement, has, for the more than two years it has been in effect, proved to be successful in quickly locating items borrowed from PLP's Research and Engineering library. It has worked as well for those of the 350 employees throughout the company who have availed themselves of the library's services as it has for the 60 R&E personnel who use it on a daily basis. Borrower's records are made and kept in a visible file for all material borrowed, whether company interdepartmental or interlibrary.

This library chargeout system not only furnishes a quick method for locating items, but also provides a permanent record of each borrower's chargeouts, should he be transferred or leave the company's employ.

ZELLA R. DALLAS, Librarian
Preformed Line Products Company
Cleveland, Ohio

MIRIAM C. VANCE: IN MEMORIAM

The Washington, D. C. Chapter of the Special Libraries Association lost one of its most beloved members in the sudden passing of Miriam C. Vance on October 27, 1960. Miss Vance, a charter member of the Washington Chapter, generously contributed both time and talent to its work throughout the years. Her most outstanding contribution was the service she rendered as Placement Officer of the Chapter, a post she held until the time of her death. For many years, she ranked first in the Association picture in the number of placements made. During her lifetime she was directly responsible for placing more than 650 librarians.

The friends who knew Miriam well could readily understand her success. Her spontaneous friendliness, her fairness to all and sympathetic understanding coupled with keen insight gained the confidence of both employer and employee. She seemed able to put two and two together and find the right person for the right job.

Miss Vance, a native of Carlisle, Pennsylvania, came to Washington, D. C. at the turn of the century and in 1904 accepted a position with the Department of Agriculture. Her entire government career was associated with this Department, with service in several of its Bureaus. During the depression years she was an active assistant in the Governor's Office of the Federal Farm Board and became librarian of the Farm Credit Administration at the beginning of the New Deal in 1933. This position she held until her retirement from government service in 1942 when she resigned to become librarian for the National Fertilizer Association, a position she held for ten years. Even after her second retirement, Miss Vance was active in professional and social circles.

Miriam Vance will be missed by her many friends but her influence will be reflected in the many lives she touched. To know her was to love her, and she possessed a loyalty to her friends and family that was unsurpassed.

A special committee has been appointed by the President of the Washington Chapter, Alice Ball, to determine an appropriate memorial as a tribute to her memory.

MRS. LOUISE PRESSGROVE

Association News

John Cotton Dana Lectures

The first John Cotton Dana Lecture in Special Librarianship will be delivered by Katharine L. Kinder, Chief Librarian, Johns-Manville Research Center, Manville, New Jersey, at Rutgers University Graduate School of Library Service on February 23. Five more John Cotton Dana Lectures are being planned for other library schools in various parts of the United States around the time of National Library Week. These lectures are under the supervision of the SLA Recruitment Committee, Marguerite K. Moran, Chairman.

Council of National Library Associations Evaluated

Using knowledge effectively is one of the greatest intellectual challenges of today, and believing that librarians should assume leadership in this endeavor, a group of 22 eminent men and women representing all fields of librarianship gathered at Columbia University in New York City, January 11 and 12, 1961, to consider if the American library world wants and needs an over-all organization to coordinate the activities of the existing library associations and to provide guidance to the profession as a whole. The meeting, which was supported by the Council on Library Resources, Inc., was called by the Program Committee of the Council of National Library Associations (CNLA) specifically to discuss the future role and functions of CNLA and the desirability of continuing or strengthening this body and its programs.

The Council of National Library Associations was organized in 1942 to foster cooperation among library associations for the mutual benefit of the entire library profession. During its 19-year history it has encouraged general and special library education, exchanges with foreign librarians, the establishment of the American Book Center (predecessor of the United States Book Exchange), since 1956 the publication of the *American Library Annual* by the R. R. Bowker Company and the formulation of bibliographic and indexing standards through the Z-39 Committee of the American Standards Association.

At the Columbia University meeting the purposes and functions of CNLA were thoroughly examined from all points of view, and it was agreed that there is a demonstrable need for an active organization to stimulate inter-association action and cooperation in specific fields. Other sessions concentrated on problems common to all library groups and possible joint projects to solve them. These problems included recruitment and manpower needs, education and training, scholarship aid, identity and status of librarians, new techniques in collecting, recording, preserving and disseminating knowledge, use of new materials, bibliographic controls, publications of library literature, legislative problems, censorship, international relations, library history and research and standards. The final session considered the formal organization and structure of the Council and how it might function more effectively.

Following the two-day conference, the CNLA Program Committee met at SLA Headquarters to evaluate the discussions and determine which problems required immediate attention and study. A report and recommendations will be submitted to the Council at its spring meeting in May. Once the report has been accepted by the Council and its 11 member associations, the recommendations can be implemented.

Invited participants attending the meeting were: Dr. Burton W. Adkinson, Head, Office of Science Information Service, National Science Foundation; Verner W. Clapp, President, Council on Library Resources, Inc.; David Clift, Executive Director, American Library Association; Jack Dalton, Dean, School of Library Service, Columbia University; Dr. Luther H. Evans, Project Director of the Survey of Li-

braries in U. S. Federal Departments and Agencies for Brookings Institute; Bernard Fry, Deputy Head, Office of Science Information Service, National Science Foundation; Chester M. Lewis, Chief Librarian, New York *Times;* Julius J. Merke, Librarian, New York University Law Library; Dr. Jerrold Orne, Director, University of North Carolina Library; Henrietta Perkins, Assistant Librarian, Yale Medical Library; Rutherford D. Rogers, Chief Assistant Librarian of Congress; Dr. Richard Shryock, Librarian, American Philosophical Society; Mrs. Irene M. Strieby, Library Consultant; and Ralph Ulveling, Director, Detroit Public Library.

Council officers attending were: Alphonse F. Trezza, Chairman, Executive Secretary, Library Administration Division, and Associate Executive Director, American Library Association; James Mack, Librarian, Lehigh University; and Dr. Lewis Sass, Dean, Pratt Institute Library School.

Members of the CNLA Program Committee are: Edward N. Waters, Chairman, Assistant Chief, Music Division, Library of Congress; Scott Adams, Deputy Director, National Library of Medicine; Elizabeth Ferguson, Librarian, Institute of Life Insurance; Bill M. Woods, Executive Secretary, Special Libraries Association; and Wyllis E. Wright, Librarian, Williams College.

Mary L. Allison, Publications and Public Relations Director, Special Libraries Association, acted as Reporting Secretary.

Recruitment Materials

SLA's principal recruitment pamphlet, *Putting Knowledge to Work: The Profession of the Special Librarian,* has been revised and reprinted. Single copies are available gratis upon request; 26-250 copies cost 11¢ each; 251 or more are 6¢ each.

The November 1960 *Willison Library Bulletin* contained a 15-page piece by Myrl Ricking entitled "A Recruitment Primer." This very practical guide outlines for the individual librarian techniques and methods of attracting young people to the library field and includes a bibliography of useful articles, books, pamphlets and films. The H. W. Wilson Company has made reprints, which are being distributed by ALA's Library Administration Division. A limited number are also available from Association Headquarters.

A third recruitment item is the four-page *Employment Outlook for Librarians,* which has been reprinted from the *1959 Occupational Outlook Handbook* prepared by the U. S. Department of Labor's Bureau of Labor Statistics. It may be purchased for five cents from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., or any of the regional offices of the Bureau of Labor Statistics.

Chapter Visits

In addition to the fall and early winter visits listed in *Special Libraries,* December 1960, p. 560, President Winifred Sewell will visit the following Chapters during the spring:

Illinois	February 20-21
Wisconsin	February 23-24
Western New York	April 8
Toronto	April 9-10
Cleveland	April 12-13
Columbus Regional Meeting	April 14-15
Pittsburgh	April 16-17

Acting upon Immediate Past-President Adkinson's recommendation that Chapter visits gradually be divided between the President and President-Elect, President-Elect Eugene B. Jackson will visit the following Chapters:

Cincinnati	April 5
Boston	April 24-25

Conference on Science Manuscripts

Dr. Nathan Reingold (Yale University), Chairman of the Executive Committee authorized at the May 1960 meeting of the Conference (see *Special Libraries,* July-August 1960, p. 308), convened a New York meeting on December 29, 1960, and presented a proposed constitution to the group after some preliminary remarks on the background and development of the Conference and the obvious need for organization.

Dr. Chauncey D. Leake (President of the American Association for the Advancement of Science) moved to adopt the constitution as presented, his motion was seconded, and it passed. Here are a few pertinent excerpts from the constitution:

"I. *Purpose.* To encourage the preservation of the primary source materials for the history of the pure and applied sciences and their cultural influences. The Conference is a non-profit organization, no funds which accrue to the benefit of any member and does not engage in political or legislative activities.
"II. *Membership.* The Conference shall initially consist of the organizations and individuals who attended the original meeting of the Conference and who choose to accept this Constitution. The Conference delegates to its Executive Committee the authority to admit to membership additional organizations and individuals who will further the Conference's purpose.
"III. . . . B. *The General Meeting.* (1) At least once a year the Executive Committee will call the entire Conference to a General Meeting to report on its activities and to seek the advice and consent of the Conference to future actions.
"IV. *Activities.* (1) To promote the creation and preservation of records of scientific and technical achievements by individuals and organizations by publicizing the need for such creation and preservation. (2) To cooperate with suitable organizations and individuals in furthering the aims of the Conference. (3) To render impartial advice to those requesting it. (4) To coordinate the efforts of cooperating organizations and individuals."

The present Executive Committee will remain in office for a year and will work on plans for necessary publicity, funds, projects and permanent organization. This Committee consists of the Chairman and eight other representatives of interested organizations, such as the American Historical Association, Association of Research Libraries, History of Science Society, Society for the History of Technology, Engineers Joint Council and National Academy of Sciences.

GEORGE S. BONN, SLA Representative

SLA Sustaining Members

The following organizations have expressed their interest in supporting the activities and objectives of the Special Libraries Association by becoming Sustaining Members for 1961. These are additions to the 56 Sustaining Members listed in *Special Libraries*, January 1961, p. 46.

BACHE AND COMPANY, New York, New York
CHARLES BRUNING COMPANY, INC., Mount Prospect, Illinois
CIBA PHARMACEUTICAL PRODUCTS INC., Summit, New Jersey
COLUMBIA-SOUTHERN CHEMICAL CORPORATION, New Martinsville, West Virginia
EASTMAN KODAK COMPANY, Research Library, Rochester, New York
ESSO RESEARCH & ENGINEERING COMPANY, Technical Information Division, Linden, New Jersey
FEDERAL RESERVE BANK OF NEW YORK, New York, New York
FORD FOUNDATION, New York, New York
FORD MOTOR COMPANY, Scientific Laboratory, Dearborn, Michigan
INDIANA STATE LIBRARY, Indianapolis, Indiana
NEW ENGLAND MUTUAL LIFE INSURANCE COMPANY, Boston, Massachusetts
NEW YORK PUBLIC LIBRARY, New York, New York
PACIFIC LIBRARY BINDING COMPANY, Los Angeles, California
RADIO CORPORATION OF AMERICA LABORATORIES, David Sarnoff Research Center, Princeton, New Jersey
STANDARD OIL COMPANY OF CALIFORNIA, Library, San Francisco, California
J. WALTER THOMPSON COMPANY, Information Center, New York, New York
UNITED STATES STEEL CORPORATION, New York, New York
UNIVERSAL OIL PRODUCTS COMPANY, Des Plaines, Illinois
UNIVERSITY OF OKLAHOMA LIBRARY, Norman, Oklahoma
WYETH LABORATORIES, INC., Philadelphia, Pennsylvania

Have You Heard . . .

Council on Library Resources Grants

The Ford Foundation has made a second grant, this time of $8 million, to the Council on Library Resources, Inc., Washington, D. C. The first grant of $5 million was given on September 18, 1956, when the Council was established to finance and encourage research into improved library methods. It is an independent organization with a board of directors headed by Gilbert W. Chapman, former president of the Yale and Towne Manufacturing Company. In working toward a solution of the problems of storing and retrieving information in research libraries, the Council has, during its four and one-half years' existence, supported the development of significant prototypes pointing toward vastly improved methods. Part of the new grant will be used to set up a laboratory for the study of photographic and electronic techniques designed to cope with the current deluge of publications resulting from the accelerated rate of research. This laboratory will also attempt to develop pilot models to improve information storage and retrieval.

Verner W. Clapp, President of the Council on Library Resources, Inc., has announced a grant of $50,000, to the ALA Library Technology Project, for a study of fire protection and insurance of library buildings and collections. Gage-Babcock & Associates, Inc., Chicago, will conduct the study, which will include arrangement of existing and design of new storage methods and buildings, development of a model insurance contract and drafting of a manual to aid in minimizing fire, explosion and windstorm hazards of libraries.

The Battelle Memorial Institute, Columbus, Ohio, has received a $49,200 CLR contract for a 12-month investigation of methods to improve the reading of microimages, to study the factors involved in microimage viewing and to develop a reasonably priced viewer for use to the public.

The Library of the University of Illinois Chicago Division has received a $50,000 grant from CLR to aid in automation of university libraries. The project is to apply advanced data processing to university library procedures, to develop an over-all system utilizing the latest electronic equipment and to adopt business machines for library use.

The Council has announced additional grants and contracts to the following:

$14,000 to the International Association of Music Libraries in behalf of the Inter-Joint Commission for the *International Inventory of Musical Sources* (a catalog of bibliography works on music to 1800).

$3,400 for publication of the fourth volume of *Masters' Theses in the Pure and Applied Sciences,* a listing of masters' theses accepted by United States colleges and universities in chemical engineering, chemistry, mechanical engineering, metallurgical engineering and physics.

$5,000 to Image Instruments, Inc., Newton Lower Falls, Mass., for study of the application of electronic systems to improvement of library utilization and economy in large metropolitan areas, to provide a basis for planning inter-library electronic communication systems.

$5,000 to the Library of Congress, Washington, D. C., for preliminary work in planning a study of mechanization in large research libraries.

$2,000 to the Department of Political Economy, Johns Hopkins University, Baltimore, for assistance to *Economics Library Selections* as an economics books selection service.

$3,000 to the Council of National Library Associations for expenses of a program-planning meeting at Columbia University, January 11-13, 1961 (*see* p. 100-101).

$1,000 to Fred W. Alpers, East Cleveland, Ohio, for a report on library binding practices in Russia, England and Germany.

$1,000 to the Agenda Committee, Second Assembly of State Libraries, for expenses of Second Assembly in Washington, D. C., November 1960.

The Sciences in Communist China

The Consultants Bureau is beginning a program for the publication and translation of

selected Chinese scientific articles. The first of these programs, under a large staff of scientists trained in the field of translating from the Chinese, is expected to be in operation in about six months and will cover from 500 to 1,000 pages of material in chemistry, physics, biology, the earth sciences, mathematics, metallurgy and related subjects during 1961. These English translations will make scientific developments and activities in Communist China available to American scientists. Further information may be obtained by writing to Consultants Bureau Enterprises, Inc., 227 West 17th Street, New York.

Members in the News

JANET BOGARDUS, Librarian, Federal Reserve Bank of New York, has received a Ford Foundation grant to establish a Central Bank Library in Logos, Nigeria, and will take a six-month leave of absence, beginning March 15, to complete the project.

ROGER M. MARTIN was appointed supervisory librarian in the research library of the Shell Development Company's Emeryville Research Center. He was formerly assistant manager of the research information service and chief of the technology department at the John Crerar Library in Chicago.

WILLIAM HENRY SIMON has left Olin Mathieson Chemical Corporation's New Haven Research Library where he was Chief Librarian to accept the position of Technical Information Supervisor with Combustion Engineering, Inc. at Windsor, Connecticut.

Solutions to Paper Deterioration Sought

The Virginia State Library has just published a report, *Permanent/Durable Book Paper: Summary of a Conference Held in Washington, D. C., September 16, 1960,* sponsored by the American Library Association and the Virginia State Library, with support from the Council of Library Resources, Inc. The problems of paper deterioration, conservation of printed records and possible solution through the manufacture of a permanent/durable paper discovered by William J. Barrow, of the Virginia State Library, were the subjects under discussion at the Conference and are related in the report. For information write to the Virginia State Library in Richmond, Virginia.

Fellowships and Scholarships

The Indiana University Libraries, under a grant from Lilly Endowment, Inc., announces two $5,000 fellowships to accredited librarians, to begin July 1, 1961, for a study of bibliographical methods, antiquarian book trade and organization and management of rare book departments. Fellows must study under the programs assigned by the Lilly Library staff, in Bloomington, Indiana, from July 1 through June 30. Information is obtainable from Cecil K. Byrd, Associate Director of Indiana University Libraries, Bloomington, Indiana.

The University of North Carolina School of Library Science offers several $1,500 fellowships, appointments to be made when available for July 1-June 30, or September 15-September 14, for work in the Louis Round Wilson Library. Applicants must be degree candidates to the School of Library Science and the Graduate School of the University of North Carolina. Fellows will work 20 hours a week in the Library. They may not register for more than 9 hours in the Fall and Spring semesters and 3 in the summer. Applications should be made not later than May 15 for a July award or August 15 for a September award. Write to Miss Jean Freeman, Admissions Officer, School of Library Science, University of North Carolina, Chapel Hill, North Carolina.

The University of Texas Graduate School of Library Science offers one $1,000 and three $500 scholarships for 1961-62. Qualifications are a bachelor's degree, a B average and satisfactory scores on the Aptitude Test of the Graduate Record Examination. For forms, write to the Director, Graduate School of Library Science, University of Texas, Box 8009, University Station, Austin 12, Texas, before March 15.

ALA Revises Scholarship List

The ALA Library Education Division is revising its list of fellowships, scholarships, grants-in-aid and loan funds open to librarians and prospective librarians. Organizations

or libraries maintaining scholarships and loan funds are asked to send detailed information on the amount of the award, who may apply and to whom applicants may write, by March 15th, to Mrs. Elizabeth Wright, Boston Public Library, Copley Square, Boston 17, Massachusetts.

Coming Events

The ALA Pre-Conference Library Buildings and Equipment Institute will be held at Kent State University, Kent, Ohio, July 6-8, 1961. Sponsored by the Section on Buildings and Equipment of the Library Administration Division of ALA, the Institute will cover aspects of library planning and construction. Registration and fees ($34.50-39.50), are due before June 21, 1961, care of the Institute at ALA Headquarters. Address general inquiries to John B. Nicholson, Jr., Librarian, Kent State University, Kent, Ohio.

The Tenth Indiana Institute in Library Adult Education, conducted by the Bureau of Studies in Adult Education, Indiana University and Purdue University and sponsored by the Division of Library Science, Indiana University, the Indiana Library Association, the Indiana State Library and the Indiana Library Trustees Association, will be held at Bloomington, Indiana, June 9-14, 1961. There is a $10 registration fee plus $3 for materials. For those approved for graduate credit (two hours), tuition is $18. Write to Bureau of Studies in Adult Education, Box 277, Indiana University, Bloomington, Indiana.

The Twenty-sixth Annual Conference of the Graduate Library School, *Seven Questions about the Profession of Librarianship,* will be held at the University of Chicago, June 21-23, 1961. Under discussion will be how a profession emerges, the idea of a library profession has developed, professional education fits into the general American pattern of education, different ports of entry affect the nature of librarianship, librarianship has accommodated specialization, librarians seek to acquire professional status and library associations in America have fulfilled the function of the professional association. For information write to Mr. Winger or Mr. Ennis. Graduate Library School, University of Chicago, Chicago 37, Illinois.

National Federation of Science Abstracting and Indexing Services will hold its annual meeting at the Manger Hotel in Cleveland, Ohio, on March 9. The morning and afternoon sessions have been planned around the theme, "Meeting the Literature Crisis." The registration fee of $15 covers the cost of the luncheon and banquet, and reservations should be sent to Raymond Jensen, NFSAIS, 301 East Capitol St., Washington 3, D. C., before March 1.

Letters to the Editor

The International Federation for Documentation (FID) is preparing a survey on the worldwide availability and use of information on the Universal Decimal Classification (UDC). In response to their request, the U.S. National Committee is gathering data for the United States. At present there exists no information center on the UDC in this country; UDC schedules are sold by the American Standards Association.

Any organization or individuals who have made use of the UDC, or who maintain a reasonably complete set of schedules of it for reference, are urged to communicate with Dr. Karl F. Heumann, Secretary, U.S. National Committee for the International Federation for Documentation (FID), in care of the National Academy of Sciences—National Research Council, 2101 Constitution Avenue, N.W., Washington 25, D. C.

KARL F. HEUMANN

A number of inquiries received at Association Headquarters recently point up important gaps in the library literature, and the *Special Libraries* Committee feels it would be most worthwhile if the journal could carry informative articles on such neglected subjects as library budgets, library catastrophes, adequate fire and water protection, centralized *versus* decentralized library systems within one company, the library's place in an organizational structure and methods of obtaining library subscriptions to journals available only to members of an association. Annotated bibliographies on specialized subjects are also always valuable. Any reader who has had experience with these or other unusual aspects of special librarianship and who feels he can write well, is urged to contact the editor, Miss Allison, or the chairman.

With this issue *Special Libraries* is inaugurating a new feature entitled "Current Concentrates of the Library World." It is planned to carry here pertinent extracts from papers and speeches that cannot be published in full as well as extracts from material published in library and nonlibrary periodicals and books. Again, suggestions and contributions of quotable material will be most welcome.

MARY BONNAR, Chairman,
Special Libraries Committee
Burroughs Wellcome & Co., Tuckahoe, New York

Off the Press . . .

Book Review

BUILDINGS, *Ralph E. Ellsworth;* SHELVING, *Louis Kaplan;* STORAGE WAREHOUSES, *Jerrold Orne* (State of the Library Art, volume 3, parts 1, 2, 3, edited by Ralph R. Shaw). New Brunswick, N. J.: Graduate School of Library Science, Rutgers—The State University, 1960. 151; 41; 52 p. $5.50 (L. C. 60-7279). Distributed by Rutgers University Press.

After reading this volume, one is immediately puzzled by what its scope is intended to be. The series title, The State of the Library Art, presumably suggests all types of libraries; yet Mr. Ellsworth in his paper on buildings limits himself almost entirely to research libraries, as represented by university libraries. The series preface gives no clue as to why the problems of public, college and special libraries should be omitted. They do have building problems. The mystery is not lessened by the fact that Mr. Orne, in discussing storage, does mention public, academic and special libraries.

As is apt to be true of any volume composed of several papers, the standard of quality varies. In this case, though, as the first paper comprises nearly two-thirds of the volume, it becomes the basis on which the book must be judged, and the verdict is not altogether favorable.

Mr. Ellsworth has obviously read widely in the field of the narrow interpretation of library buildings to which he has limited himself and has presented his material in a logical manner. In his "Targets for Research," he has offered many useful topics for investigation. If even half of them could be accomplished within the next few years, librarians and architects could cooperate to secure much better buildings. However, his text seems to have more than its share of errors, "*un*verbatim" quotations and inconsistent and inaccurate bibliographical notes. Although the writer is well aware of the difficulties inherent in editorial and bibliographical work, a book by librarians for librarians should certainly set higher standards.

The two articles by Mr. Kaplan and Mr. Orne do not suffer from the faults of the first article, the bibliographies being more consistent and the only error noted being obviously typographical—"a stack ½" high." Mr. Kaplan's paper treats of three main topics—storage of books, storage as affected by microcopies and storage of other non-book materials. His comments and suggestions for further study are pertinent. Mr. Orne's paper reviews the developments in storage libraries and ends with some provocative thoughts about the relationship between acquisition policies and storage needs, and the possibilities inherent in national coordination of library resources.

To the extent that reference must still be made to original sources for verification, this volume has failed in its stated purpose of obviating the need for referring to the literature. To the extent that it points out needs for research—and herein lies its greatest value—it should be read by library student and administrator.

GEORGE E. PETTENGILL, Librarian
American Institute of Architects,
Washington, D. C.

Fortune Plant and Product Directory

Fortune magazine has for some time issued a directory of the 500 largest American Corporations by name only. Now it is offering an expanded version of this service in the *Fortune Plant and Product Directory of the 500 Largest U. S. Industrials.* Available only to *Fortune* subscribers and other selected top management officials, the directory will be prepared in the form of a triple index: alphabetical company listing, geographical listing and product listing. The 500 companies' 10,000 plants, their locations, products, output, sales, profits, employees, plant and product classification in SIC and whatever other information is considered pertinent will be listed. Further information can be obtained by writing to *Fortune Plant and Product Directory, Fortune,* Rockefeller Center, New York 20, New York.

Philippine Union List

The Institute of Public Administration, University of the Philippines, Manila, has announced publication of a revised *Union List of Serials of Government Agency Libraries of the Philippines* (1960, 934 p. pap., $12), compiled by the Inter-Departmental Reference Service staff. Serial holdings of 79 government agency libraries are recorded. Divided into three parts, it contains alphabetical, subject and Philippine serials lists. It is available, postage free, from the Institute, P. O. Box 474, Manila.

Sci-Tech Offers New Periodical Directory

The Science-Technology Division of SLA has released *Aeronautics and Astronautics: A World List of Current Periodicals,* by C. D. Rife. This is a compilation of journals, published more than once a year, for reference in a technical library. This directory was originally to have been one section of a nine-section *Source Book of Aero-Space Information* for aeronautical librarians. However, the other eight categories have no definite completion date; therefore it was considered worthwhile to publish simply Mr. Rife's work now. Copies may be obtained by payment in ad-

vance of $3 to John P. Binnington, Treasurer, Sci-Tech Division, Research Library, Brookhaven National Laboratory, Upton, Long Island, New York.

New Serials

COMPUTING REVIEWS, formerly a part of *Communications of the ACM,* begins publication as a separate bi-monthly in February, 1961. Published by the Association for Computing Machinery, the journal will supply information on current publications throughout the world in the area of computers. The entries will contain bibliographical and descriptive material. Subscriptions, $10 yearly, may be obtained through Mrs. Irene Hollister, Executive Secretary, Association for Computing Machinery, 14 East 69th Street, New York 21, New York.

FORENSIC SCIENCE SOCIETY JOURNAL, the official, biennial publication of the Forensic Science Society, contains articles, news notes, reviews, abstracts and other matter dealing with Science as related to Law. Published since September 1960, at 20 shillings an issue and two pounds a year, the Journal may be obtained from the Journal of The Forensic Science Society, c/o Rossett Holt, Pannal Ash Road, Harrogate, Yorkshire, England.

INTERNATIONAL PHILOSOPHICAL QUARTERLY, begun in January 1961, is an international review of philosophy in English. It includes philosophy articles, recent literature on a particular movement, author or problem and book reviews and notices. The review is edited by the Department of Philosophy of Fordham University, New York and Berchmans Philosophicum, Heverlee-Louvain, Belgium. The annual subscription price is $6.50 ($3.00 in Asia) (Sustaining or Institutional members, $25); single copies are $1.75. Orders should be sent to International Philosophical Quarterly, Fordham University, New York 58, New York or to Berchmans Philosophicum, Waversebaan, 220 Heverlee-Louvain, Belgium.

JOURNAL OF EDUCATION FOR LIBRARIANSHIP, a quarterly journal of the Association of American Library Schools, replaces the *Reports of the Meetings of the Association of American Library Schools,* the *AALS Newsletter* and the *AALS Directory.* The Journal offers articles on library education, library school statistics, a faculty directory, reviews, news items, workshop and institute summaries, calendar of events and Association activities and reports. The subscription rate is $5 annually; single copies are $2. Subscriptions and editorial correspondence should be sent to the Publications Office, University of Illinois Graduate School of Library Science, Urbana, Illinois.

NUCLEAR ENGINEERING ABSTRACTS is a quarterly journal, first issued in July 1960, of the Silver End Documentary Publications. It contains about 200 articles abstracted from some ninety journals in the field of nuclear engineering. There are alphabetical subject and author indexes and publications lists giving the names and addresses of publishers. Subscriptions are 6 guineas or $18.50 and may be obtained by writing to Silver End Documentary Publications Ltd., 9-11 Tottenham Street, London, W.1.

SLA Authors

BONN, GEORGE S. Science Belongs in a Library. *Library Journal,* vol. 86, no. 1, January 1, 1961, p. 49-51.

BOUWHUIS, ANDREW L. Standards for School Library Programs. *Catholic Library World,* vol. 32, no. 1, p. 39-42.

CLAPP, VERNER W. The Library, The Great Potential in Our Society? *Wilson Library Bulletin,* vol. 35, no. 4, December 1960, p. 303; 306-7.

CLUXTON, HARRIETTE M., comp. A Checklist of O.E.P. Publications, 2nd ed., April 1960. *Revue Optometrie,* July-August 1960, p. 26-8; 30.

ESTES, RICE. Segregated Libraries. *Library Journal,* vol. 85, no. 22, December 15, 1960, p. 4418-21.

ORNE, JERROLD. Storage and Deposit Libraries. *College and Research Libraries,* vol. 21, no. 6, November 1960, p. 446-52; 461.

ROGERS, JOSEPH W. *U. S. National Bibliography and the Copyright Law.* New York: R. R. Bowker, 1960. $5.

SHARP, HAROLD S. "Just Working Here" Is Not Enough. *Trained Men,* vol. 40, no. 4, 1960, p. 17-19.

———. No Man Can Serve Two Bosses. *Trained Men,* vol. 40, no. 4, 1960, p. 22-3.

WELCH, EDGAR D. Your Technical Library. *Colorado Society of Engineers Bulletin.*

———. Coordinate Indexing Procedures. *Western Business Review.*

RECENT REFERENCES

Librarianship

ANNUAL REPORT OF THE LIBRARIAN OF CONGRESS: For The Fiscal Year Ending June 30, 1959. Washington, D. C.: Library of Congress, 1960. viii, 182 p. $2. (L. C. 6-6273*)

Appendixes. Index.

ASLIB YEAR BOOK 1960-61. London: Aslib, 3 Belgrave Square, 1960. 214, xvii p. pap. 12s. 6d. members; 18s. nonmembers.

Records membership, history, function, publications and the Articles of the Association. Reading list. Organizations and suppliers of interest to special libraries.

BOOKS, YOUNG PEOPLE, AND READING GUIDANCE. *Geneva R. Hanna* and *Mariana K. McAllister.* New York: Harper & Brothers, 1960. xiii, 219 p. $3.50. (L. C. 59-12674)

CLASSIFICATION AND INDEXING IN SCIENCE, 2nd ed. *B. C. Vickery.* New York: Academic Press

Inc.; London: Butterworths Scientific Publications, 1959. xix, 235 p. $6.

Discusses techniques of subject analysis, indexing, mechanical retrieval. Appendixes. Name and Subject Index.

GUIDELINES FOR LIBRARY PLANNERS: Proceedings of the Library Buildings and Equipment Institute. *Keith Doms* and *Howard Rovelstad,* eds. Chicago: American Library Association, 1960. 128 p. pap. illus. $3.75. (L. C. 60-14701)

Papers of the Buildings and Equipment Section, Library Administration Division, ALA, June 18-20, McKeldin Library, University of Maryland. Appendix is: To Remodel or Not To Remodel—an architect's and a librarian's viewpoint.

MANUAL PARA LA ORGANIZACIÓN DE BIBLIOTECAS INFANTILES Y ESCOLARES (Columbus Memorial Library Bibliographic Series No. 48). *Emma Buenaventura.* Washington, D. C.: Union Panamericana, Secretaría General, Organización de los Estados Americanos, 1960. 57 p. pap. (Available from Biblioteca Conmemorativa de Colón, Departamento de Asuntos Culturales, Union Panamericana.)

In Spanish throughout.

NATIONAL LIBRARIES: THEIR PROBLEMS AND PROSPECTS: Symposium on National Libraries in Europe, Vienna, 8-27 September 1958 (UNESCO Manual for Libraries #11). Paris: UNESCO; New York: Columbia University Press, 1960. 125 p. pap. illus. $2.00.

Five parts: Organization and questions; bibliographical activities; inter-library cooperation; conclusions; Annexes, list of Symposium Members and resolutions adopted by the International Federation of Library Associations in Madrid, 13-16 October 1958.

ORDER PROCEDURES PRESENTED AT 1959 AALL INSTITUTE FOR LAW LIBRARIANS: A Manual and Discussion (AALL Publications Series, No. 2). *Viola Bird et al.* South Hackensack, New Jersey: Fred B. Rothman & Co. for American Association of Law Libraries, 1960. 65 p. pap. $4.50.

Two papers presented at the 1959 Institute: Sample Order Manual for Law Libraries and Order Procedures for a Law Library. Appendix, list of suggested files and bibliography.

OF, BY, AND FOR LIBRARIANS: Further Contributions to Library Literature. *John David Marshall,* ed. Hamden, Connecticut: Shoe String Press, Inc., 1960. xv, 336 p. $7. (L. C. 60-10701)

Two groups of essays and articles: Books and Libraries; Librarians and Their Profession. Author-title index.

REPRODUCTION OF CATALOGUE CARDS. *Philip S. Pargeter.* London: The Library Association, Chaucer House, Malet Place, 1960. 48 p. pap. illus. 8s. 8d.; 6s. 6d. to members.

Describes processes and equipment for card catalog reproduction.

TWENTY-FIVE CASES IN EXECUTIVE-TRUSTEE RELATIONSHIPS IN PUBLIC LIBRARIES (Case Studies in Library Administration, Series II). *Kenneth R. Shaffer.* Hamden, Connecticut: Shoe String Press, Inc., 1960. 187 p. $4.50. (L. C. 60-9464)

Presents for study problems which arise between directors of libraries and their trustees.

Bibliographic Tools

AMERICAN REVIEW CUMULATIVE INDEX (1933-1937). *Herbert K. Goodkind,* ed. New York: author, 155 East 42nd Street. 7 p. Mimeo. $1.25.

Author index.

BIBLIOGRAPHY OF AMERICAN AUTOBIOGRAPHIES. *Louis Kaplan et al.,* comps. Madison: University of Wisconsin Press, 1961. xiii, 372 p. $6.00. (L. C. 61-5499)

Contains 6,377 author entries of United States bibliographers whose works were published before 1946. Subject index.

BRITISH SCIENTIFIC AND TECHNICAL BOOKS 1953-7: A Select List of Recommended Books Published in Great Britain and the Commonwealth. *L. J. Anthony,* ed. London: James Clarke & Co.; New York: Hafner Publishing Company, 1960. ix, 251 p. $9.50.

Published for Aslib. Entries on all major divisions of science and technology, books in the field of documentation, libraries, psychology, planning and architecture and government publications and papers of societies and institutions. Classified bibliography, author index, subject index.

CUMULATIVE INDEX 1915 THRU 1959 TO THE MUSICAL QUARTERLY. *Herbert K. Goodkind,* ed. New York: Goodkind Indexes, 155 East 42nd Street, 1960. 204 p. pap. $25. (L. C. 16-24484CI)

Author and subject indexes.

FOLK DANCE GUIDE: Eleventh Annual Edition, 1961. *Paul Schwartz.* New York: Record Press Inc., P. O. Box 342, Cooper Station, 95 Fourth Avenue, New York 3, 1961. 40 p. pap.

Sections on folk dance in the United States, poetical and prose quotations, national directory of instruction groups, calendar of events and a selected bibliography.

INDEX TO PLACE OF PUBLICATION OF ASME PAPERS, 1950-1959. California: Specialized Information Services, 1960. 17 p. pap. $1.50.

Includes papers which have carried an identifying number and have been published in one of the serials of the American Society of Mechanical Engineers.

LIST OF SCIENTIFIC AND TECHNICAL SERIALS CURRENTLY RECEIVED BY THE LIBRARY OF CONGRESS. *Science and Technology Division, Library of Congress.* Washington, D. C.: Card Division, Library of Congress, 1960. v, 186 p. pap. Gratis. (L. C. 60-60055)

Prepared under the sponsorship of the National Science Foundation. Contains approximately 13,000 titles from various working files of the Library of Congress. Serials published in countries using alphabetic languages are arranged in a

single list according to Library of Congress entry; serials originating in the Far East are grouped by country of origin.

PUBLIC HEALTH AND MEDICINE IN THE USSR: An Introductory Guide to Reference Sources (Library News, vol. 13, supplement No. 2). Geneva: World Health Organization, 1960. 130 p. pap. (Available from World Health Organization, Library & Reference Services, Palais des Nations, Geneva, Switzerland.)

Lists general guides, abstracting and indexing periodicals, bibliographies, directories, dictionaries, encyclopedias, administrative material and surveys. Index.

STUDIES IN BIBLIOGRAPHY: Papers of the Bibliographical Society of the University of Virginia, vol. 14. *Fredson Bowers,* ed. Charlottesville, Virginia: Bibliographical Society of the University of Virginia, 1961. 291 p. $10; $6, members. (L. C. 49-3353 Rev.*)

Notes on contributors and Society announcements and publications, plus 25 articles.

Directories

DIRECTORY OF PERIODICALS 1960-61 EDITION. New York: American Trade Press Clipping Bureau, 1960. A-57, 234 p. pap. $12.

Lists 6,837 titles published in the United States, Canada and foreign countries. Includes medical, scientific, chemical, drug, electrical, electronic, engineering, construction, industrial, religious, educational and farm journals; consumer magazines and labor papers; house organs. Subject and title indexes.

LIBRARY TELEX DIRECTORY: A List of Libraries in the United Kingdom with Access to Telex. London: Library Association Reference, Special and Information Section, 1960. 15 p. pap. Gratis.

CLASSIFIED ADVERTISING

Positions open and wanted—50 cents per line; minimum charge $1.50. Copy must be received by tenth of month preceding month of publication.

POSITIONS WANTED

WOMAN, experienced in the fields of Social Science and business literature seeks interesting position in New York City. Write Mrs. Zena Jacobs, 2 Grace Court, Brooklyn 1, New York.

YOUNG MAN: M.A. (History), M.A.L.S., seeks college or university library position. Interested in reference, bibliography or a position with varied duties. Historical or special library position also of interest. Willing to acquire more knowledge of foreign languages or other subjects depending on nature of position and opportunities for experience. Locations: Midwest-West, Southeast-Southwest. Write: Box B 50.

POSITIONS OPEN

BUSINESS LIBRARIAN. Vacancy in the Newark Business Library for library school graduate, with or without experience. Starting salary within range $4,670-6,170. Liberal fringe benefits. Write: Bernard Schein, Deputy Director, Newark Public Library, 5 Washington Street, Newark 1, New Jersey.

CATALOGER AND INDEXER. Experienced cataloger desired for growing electronics organization. Opportunity to help develop a special information retrieval system and assist with literature searches. Other duties would include book selection and reference work. College degree required with training in cataloging. Scientific background preferred. Salary commensurate with qualifications. Exceptional fringe benefits including profit-sharing and bonus plan. Write to Sally Dolly, Librarian, Auerbach Electronics Corporation, 1634 Arch Street, Philadelphia 3, Pennsylvania.

FLINT PUBLIC LIBRARY—two positions: Assistant Art, Music and Drama Department; Head, Business and Industry Department. Beginning librarians enter at $5,150. Beginning salary for experienced librarians ranges up to $7,345 depending upon experience and background. Library Science degree required. 4 weeks vacation. 5 day week. Credit for military experience. Annual increments, sick leave, social security and good retirement plan. Apply: Personnel Office, Flint Public Library, Flint, Michigan.

LIBRARIAN. We are looking for a young man with a bachelor's or graduate degree in science, training and/or experience as a special librarian and experience with or interest in new documentation techniques. This individual will develop the present and future technical information systems needed by the company, while assisting with library selection and reference work. Salary will be commensurate with training and experience. Send replies in confidence to Mr. C. D. Gardei, Professional Employment, Esso Research and Engineering Company, P. O. Box 175, Linden, New Jersey.

LIBRARY ASSISTANT needed by Ferris Institute, a State College, for circulation/reference or cataloging/order work. Library is in process of expansion. Library degree necessary, 12 months' schedule with four weeks' vacation, state retirement, sick leave, beginning salary $6,000, adjustment upward for appropriate experience. Send resume to Mrs. Goldie T. Nott, Librarian, Ferris Institute, Big Rapids, Michigan.

PROVIDENCE (R.I.) PUBLIC LIBRARY. Department Head for Business-Industry-Science Department. New Building, 38-hour, 5-day week, 9 paid holidays, 4 weeks' vacation, Social Security, pension, annual increments, salary open. LS. plus suitable experience required. Apply: M. Joyce Davidson, Personnel Supervisor, Providence Public Library, Providence 3, Rhode Island.

POSITIONS OPEN (continued)

TECHNICAL LIBRARIAN: An unusual opportunity for a librarian with training in the physical sciences to work in one of the Atomic Energy Commission's National Laboratories. Responsibilities will include reference work, literature searching, selection of materials and administration of a Reading Room with broad collections in the fields of physics, electronics, and mathematics. Requires minimum of 5th year library science degree and technical library training or experience. Foreign language ability desirable. Excellent opportunities for growth. Salary commensurate with training and experience. The Laboratory is located about 25 miles southwest of Chicago, near many suburban communities. 40-hour week, month vacation, TIAA Retirement, and other employee benefits. Write: Mr. C. E. Rickleff, Professional Placement Manager, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, Illinois.

FOR SALE

BOOKS located fast. Out-of-print, scarce. Lowest prices without obligation. Book Mark, 51W Walnut, Mt. Clemens, Michigan.

FOR SALE: Jour. Amer. Chem. Soc. unbound 1920-1955. Asking $200, will consider any offer. Grant Willey, 408 Ravine Park Drive, Lake Forest, Illinois.

The Board of Education for the City of

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Invites Applications from

EXPERIENCED LIBRARIANS

for the following positions:

Head, Documentation Section
Head, Technical Services Section
Head, Reference & Circulation Section

with the Education Centre Library.

This is a new special library now being planned and designed for the needs of a large school system, embracing curriculum research, administration, publications, school buildings, finance, and adult education.

Applications, which will be kept confidential, should be made in writing on or before March 24, 1961, stating training, experience, and other qualifications. Starting salary: $6,800 to $8,300 per annum, depending on qualifications and experience.

Applications should be addressed to:

Dr. Z. S. Phimister
Director of Education
155 College Street **Toronto 2B, Canada**

The MILWAUKEE PUBLIC LIBRARY announces an examination for COORDINATOR OF SCIENCE. 1961 salary scale: $9,060-$10,920 in four steps. Under supervision of Assistant City Librarian has responsibility for direction of service, supervision and training of staff, development of collection, and community contacts in areas of science, technology, and business. A minimum of 8 years experience is required: 5 in the subject field; 2 at supervisory level. Application forms may be obtained by writing:

EXAMINING DIVISION
City Service Commission
Room 701, City Hall
Milwaukee 2, Wisconsin

and must be completed and filed by April 10, 1961. Examination consists solely of evaluation of training and experience.

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Permanent opening immediately available in our Administrative Division. Salary commensurate with ability and experience.

LIBRARIAN

Prerequisites include a Master's degree in Library Science with undergraduate study preferably in physical sciences including courses in chemistry; minimum 3 years experience as supervisor in technical library work. Workable knowledge of French, German, or Russian necessary.

Send resume stating salary requirement to:

Technical and Salary Section
PLANT PERSONNEL DIVISION
P. O. Box 8138 **Philadelphia 1, Pennsylvania**

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